

Commerce

SOUTHERN TEXTILE BULLETIN

VOL. 29

CHARLOTTE, N. C., THURSDAY, NOVEMBER 5, 1925

NUMBER 10

Rayon and Rayon Mixtures on Northrop Automatic Looms

Northrop Looms are successfully weaving Rayon and Rayon mixtures with Cotton.

Special Shuttles, a new style of skewers for Rayon cops, our latest Intermittent Feeler and some minor loom adjustments were found necessary in the adaptation of the loom for best results.

New looms are equipped with these devices that our experts have worked out. Looms now in your mill may be easily changed to take them.

Our machinery and our experts are at your service.

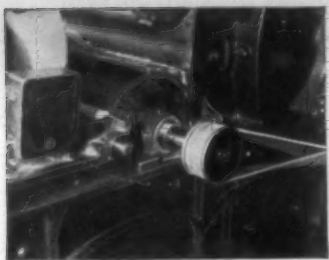
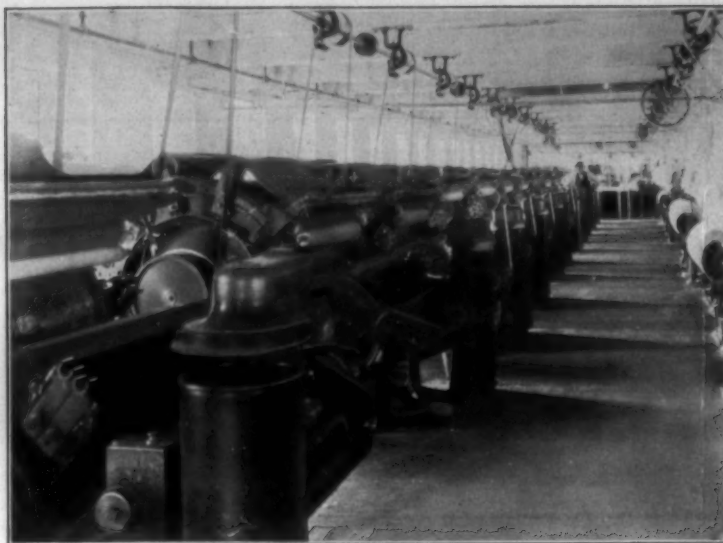
Let's Talk It Over

DRAPER CORPORATION

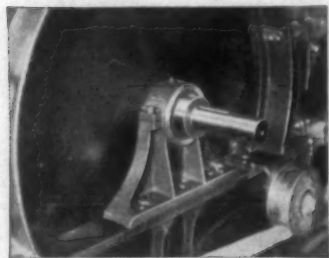
Southern Office Atlanta Georgia

Hopedale Massachusetts

A group of Fafnir-equipped cards in the mill of the Georgia Mfg. Co., Whitehall, Ga. Four Fafnir Bearings are used on each machine.



Close-up of Fafnir ball bearing mounting for licker-in.



Close-up of Fafnir ball bearing main cylinder mounting.

TYPICAL APPLICATIONS OF FAFNIR BALL BEARINGS FOR TEXTILE MACHINERY

Picker: beater and fan shafts
Spinning Frame: cylinder bearings

Card: licker-in, main cylinder
Slasher: large and small cylinders
Loom: crank shaft and loose pulley

Warper: measuring roll and cones

Twister: cylinder bearings
Cotton exhaust: fan shaft bearings

Hanger boxes, blower and fan boxes, and other transmission equipment.

Fafnir giving the service these cards demand

Holding the close setting between licker-in and main cylinder to the correct fraction of an inch, keeping the cotton and the card fabric free from the damage of oil from leaky bearings, easy starting without calling for excessive power — these are the textile engineer's requirements that bearings for cards must satisfy.

Impossible, to be sure, for the old fashioned variety of boxes. Yet easy for Fafnir Ball Bearings, as many mills such as the Georgia Mfg. Co., of Whitehall, Ga., know. This concern has forever banished the trouble formerly experienced with plain bearings by installing Fafnir on all carding machines.

Made with a long inner ring which provides an extra

large seat, Fafnir Ball Bearings for cards support the shaft firmly and keep it in perfect alignment. A slip fit mounting is used which avoids the complicated adjustments of the tapered adapter sleeve.

Changing plain bearings over to Fafnir is a simple and inexpensive procedure which it may pay you, also, to look into. Write for sizes, prices, and our recommendations.

THE FAFNIR BEARING CO.

Makers of high grade ball bearings — the most complete line of types and sizes in America.

NEW BRITAIN, CONN.

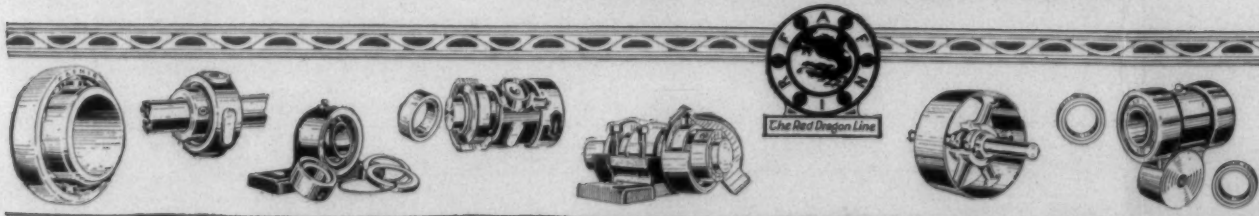
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FAFNIR

BALL BEARING
UNIT-ALIGNING
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Whitin Machine Works

Whitinsville, Mass.

November 5, 1925

Dear Mr. Mill Man:

No wonder that the Whitin Self-Balanced Roving Frame is the best one on the market! Not only is the self-balanced frame the best in principle and has embodied in it the best of workmanship and materials, but wherever one of our frames is installed it is followed up by "Speeder" Brown.

Mr. Brown, after numerous years with the Providence Machine Company, came to us upon our acquisition of that Company in 1910 and since then has proved to many of your business associates that the Whitin Roving Frame and the Whitin Service, largely exemplified by his own service, is an unbeatable combination.

Mr. Brown is also very much interested in Worsted Roving and Spinning. If there is anything you want to ask about differential motions, top rolls, flyers, Spindles, gears and even paint for Roving Frames, get in touch with either Mr. Brown or with us.

We expect an immediate reply.

Yours sincerely,

WHITIN MACHINE WORKS



Mr. W. S. Brown

AT
YOUR
SERVICE



Indian Head Mills, of Alabama
Cordova, Alabama
R. P. Snelling, Pres.
Geo. C. Cunningham, Treas.

Drills, Osnaburgs,
Sheetings, Flannels
28,112 Spindles 880 Looms

Amory, Browne & Co.
Selling Agents

Air Conditioning Knowledge—Put to Work

Humidifying a mill then is this.

Decide what you want to accomplish.

Do you want to *kill static*? All right, that's one problem, and a very simple one.

Or—do you want to secure *regain*, more production from less raw material—and a better product? That involves more study, more knowledge and more investment.

Or—with these do you want to include a pronounced *cooling effect* in the mill? That involves still more study, still more engineering knowledge—and still more investment.

The capacity of a humidifying equipment varies with the requirements. The price varies with the capacity.

When your first installation was made in the mill, the object in mind was largely that of overcoming static electricity. This accomplished, the next step was to increase the percentage of regain. In doing so, along with the electrification of the mill, arose the problem of keeping down the temperature of the mill in summer.

That all these requirements have been successfully met by means of combining the Turbo equipment already in use with installation of your new High Duty heads, is a matter of gratification and a fine recommendation for your understanding of our problems and the character of your equipment.

Yours very truly,

W. M. Runkard

Agent.

WBP:MG



Parks-Cramer Company

Engineers & Contractors
Industrial Piping and Air Conditioning

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Boston

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Right Regain



Where Friction Attacks Hyatt Bearings Protect

THE bearing points in your machinery—that is where friction seeks to waste and destroy.

When plain bearings are used the inevitable results are loss of power, excessive lubrication requirements and trouble-making wear.

You can guard against these evils by using machinery equipped with Hyatt roller bearings. These modern bearings provide the easily rotating action of steel rollers in place of the dragging, wasteful friction of plain bearings.

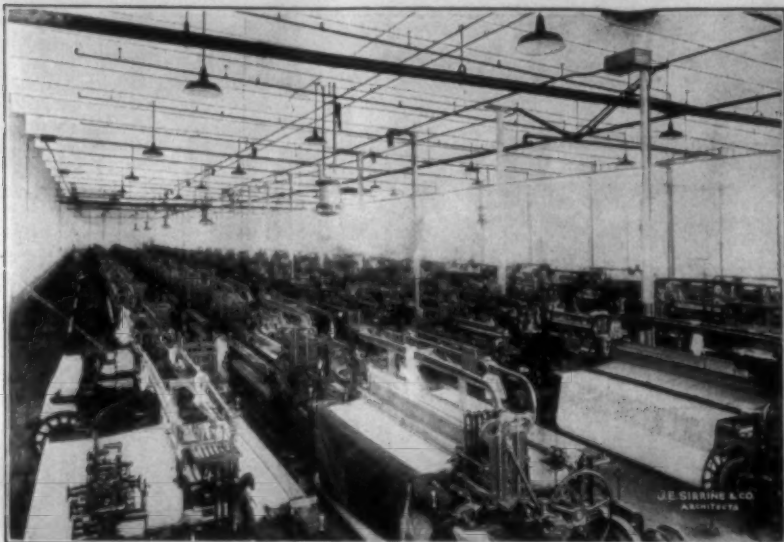
Then, in contrast, the results are thoroughly reliable operation, substantial economies in power and lubrication, and the virtual elimination of wear.

Specify Hyatt bearings when buying textile machinery of any kind. They are investments that yield big returns.

HYATT ROLLER BEARING COMPANY
NEWARK DETROIT CHICAGO SAN FRANCISCO
WORCESTER PHILADELPHIA CHARLOTTE
PITTSBURGH CLEVELAND

The story of Hyatt equipped textile machinery is told in Bulletin No. 2100—fifty pages of interesting information illustrated with machine designs and photographs of installations. Write for a copy.

HYATT ROLLER BEARINGS FOR TEXTILE MACHINERY



Throughout the HOUSTON TEXTILE MILLS at Houston, Texas, ceilings and walls are painted with Barreled Sunlight for lustrous, lasting whiteness



Interior of the WORTH COTTON MILLS at Fort Worth, Texas. Here also Barreled Sunlight is proving the most durable and sanitary white paint finish

Two Big Plants in Texas

whiter · cleaner · lighter

Painted with Barreled Sunlight

WHEN the "Rice Process" of making paint produced Barreled Sunlight, textile plants at last had a white interior finish with every desired quality—at the lowest cost per square foot of surface covered!

Today, ceilings and walls in hundreds of textile plants are painted with this unusual finish. Above are pictured two typical interiors—the Houston Textile Mills and the Fort Worth Cotton Mills—where Barreled Sunlight is proving its superiority for long-lasting whiteness, cleanliness, and real economy.

* * *

APPLIED by brush or spray, Barreled Sunlight gives a lustrous finish so even and smooth that dirt cannot sink in, and superficial dust can be washed off—instead of repainting. Repeated washings will not wear away the durable surface.

Barreled Sunlight is actually guaranteed to remain white longer than any gloss paint or enamel, domestic or foreign, applied under the same conditions—also, not to flake or scale if properly applied.

Barreled Sunlight is sold in 55 and 30 gallon churn-equipped steel drums, and in cans from ½ pint to 5 gallons. Where more than one coat is required, use Barreled Sunlight Undercoat.

For exterior painting, use Rice's Reinforced Paint, a scientifically machine-made paint in pure white and unusually clear, well-defined colors. Used by textile mills everywhere.

Send the coupon to obtain our interesting illustrated booklet, "More Light," and painted sample of Barreled Sunlight.

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SOUTHERN TEXTILE BULLETIN

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VOL. 29

CHARLOTTE, N. C., THURSDAY, NOVEMBER 5, 1925

NUMBER 10

The French Textile Industry

THE following information regarding the French textile industry is contained in report of Stuart W. Cramer, Jr., of the Cramerton, N. C., who studied the textile industry in France as delegate from the American Cotton Manufacturers' Association, authorized at the annual convention in May at New Orleans.

Merely as a matter of record, I would say that my trip was in the nature of an exchange of industrial and business representatives between France and the United States under the auspices of the Franco-American Branch of the American Good Will Society—the object being to establish closer industrial, political and social relations between the two countries, by personal contacts of those engaged in similar work in their respective countries.

My trip occupied about seven weeks, and at the outset I wish to acknowledge the many courtesies and kindnesses extended to me by R. D. Jenkins, secretary of the Franco-American Branch in New York; M. Jean Rouvier, secretary of the French Branch in Paris, and M. Jules Siegfried, of the French Committee. The initiative in the whole matter was taken by Miss Anne Morgan, of New York and Paris, who is devoting a large amount of her time toward the cultivation of closer affiliations between the two countries.

In the short time that I could be away, the observations I was able to make of the French textile plants which I visited were extremely general, and I might say casual. The itinerary naturally followed about the same course that we unquestionably would have arranged for a French delegate to this country under similar circumstances. Many French mills were decidedly opposed to allowing a foreign competitor, particularly an American competitor, to go through their plants at all; some who did show me through their plants were obviously more or less on their guard; and a few of them extended every opportunity for my acquiring information and answered questions freely. On every occasion, however, the French people were exceedingly courteous, more than friendly, and undoubtedly went as far, if not further, than we would have gone under the same circumstances. I refrain, for appar-

ent reasons, from mentioning the names of any plants or individuals.

It was not my purpose to pay any attention whatever to spinning plants, but only to styling, designing, weaving, dyeing and finishing. This was what made my position both delicate and difficult, because most French designers and manufacturers are quite bitter on account of the many Americans who go abroad to get their designs and copy them in the United States.

Notable Point of Interest.

The following points, made at random, are those of outstanding interest to our industry:

1. As a rule, French plants have their designing done by Paris designers, and but little work of that kind is done at the mills. I had quite a lengthy interview with M. Rodier, the leading French designer. Of course, his work is mostly for hand weaving, but it is largely copied in printed work in America. His view of styling is that it is a personal artistic gift; he himself leans more toward "New Art" than to the more conventional classical designs. French designers in general take styling as an art much more seriously than in this country; they endeavor to create rather than to imitate, to lead rather than to follow—which, of course, is comparatively easy on account of their prestige. I also had quite an interview with M. Jacques Worth, the great French dressmaker, with particular reference to fabrics for women's wear.

2. The general trend of almost all French colored work is to weave in the grey just as is also largely done in this country, and then to piece-dye, finish and print the goods for their colored effects. One thing that impressed me particularly is the trend toward the use of mordants, both on yarn and cloth, followed by cross-dyeing, instead of using dyeing and finishing in the usual way. This is something that our own finishers must naturally also be working upon more or less unobtrusively, because it seems to be one of the most important developments in French textile circles.

3. One thing that astonished me, however, I must again emphasize, is that almost all of the cotton looms in France seem to be operated as single box, with or without dobbies

and jacquards; there is little or no yarn-dyed goods being made with multiple box looms. In practically all classes of goods, the French see few advantages in automatic looms, preferring closer attention to work of the operatives and higher loom speeds to make a superior fabric at less cost.

4. In France, just as in the United States, natural silk or rayon decorations predominate in the better grades of cotton fabrics.

The French operatives average only \$1 per day wages and give far closer attention to their work than any operatives I have ever seen in America. French families have worked for generations in their plants and take a craftsman's pride in their work. Whether we like to admit it or not, French workmen on the average will turn out better and more work with the same amount of labor than in corresponding mills in America. They never leave their work in the mill unless absolutely necessary; they do not congregate and converse, and they do not sit or stand around merely watching to see that the looms keep running; they closely and ceaselessly go from one loom to another so that the highest possible production is gotten from the looms, and practically all defects are caught before they make seconds.

It is also my observation that a French plant is usually operated with fewer operatives than could possibly be done in America with the same equipment.

One thing that strikes a visitor to a French mill is the splendid and healthy relationship that exists between all ranks in the plant; leading and not pushing is obviously their method; and the French workman evidently responds more to friendly interest than to the type of discipline of the so-called "efficiency experts." I am aware that it is the fashion in America to depreciate foreign workmen and to boast of our own superior intelligence. I would be the last man to admit that our people cannot do as well as the French, but I do not believe that they are actually doing it, as a rule. As to whether the French workmen is or is not just about as keen and bright-looking as any other, I have brought back some photographs of groups of operatives in the different

departments in different French mills, which I suggest be published from time to time in the ACMA Gazette in order that not only our managers, but our own operatives may have a chance to size up the kind of people with whom we are in foreign competition.

Either Very New or Very Old.

5. The equipment in French mills is, as a rule, either extremely modern or extremely old. It is all practically English, French or German manufacture. All that which replaced the old French machinery destroyed during the war is the newest and most up-to-date equipment, and unquestionably with their cheap labor and up-to-date equipment can produce the finest grades of goods at less than one-half the cost than we can possibly do. The French mills are very prosperous and have run full time through all the periods of depression in both England and America, except for a couple of months in 1920.

6. Naturally, in the light of what has already been said, French finishing and printing establishments are unusually modern and efficient, and are very secretive of their methods. Mill men who regularly furnish goods to French finishers and printers tell me that they have never seen the inside of those establishments. My own observation was that they are very similar to the best American plants which I have seen; but that the French practice is to carry this department of manufacture further than is done in the United States. Elaborate designs and styling are very much in vogue now all over the world, and the French designers, finishers and printers are not only experts and artists in their work but their methods of manufacture particularly lend themselves toward elaborate and bizarre effects. Just as in this country, the converters do both a commission business and a merchandising business, in which they buy grey goods according to their own specifications and finish and style them themselves.

7. While there is a moderate amount of ring spinning for the medium and coarser counts in France, nearly all the fine work is mule spinning. I am inclined to share the general opinion that fine
(continued on Page 32)

Need and Value of Safety

IT is in the industries that are most hazardous, that safety has been practiced longest, and has shown the most favorable returns. We must grant, at once, that the risks in the process of textile manufacturing are not by any means as great as those involved in the steel mills, or the railway companies. Nevertheless, serious accidents which should have been prevented, occur with alarming frequency in the textile industry. And the responsibility for this type of accident rests entirely upon the industry itself. To those of us who are familiar with what has been accomplished by safety in the textile concerns that have accepted it, it has been a source of surprise and wonder that out of the 2,350 industries of over 100 employees in the United States, classed as textile, only 121 are members of the National Safety Council. Surely, ours is one of the slowest industries to awaken to and accept the benefits offered by the safety movement. Therefore, I shall try to point out clearly the advantages to be derived from it, in the hope that more may see the need for it.

All employers of labor realize that accidents cost money, and interfere with production. Unfortunately, however, too large a number of textile executives fail to recognize the fact that the remedy lies in the

Address by Dr. G. H. Van Emburgh, Jr., Medical Director, Clark Thread Company, Newark, N. J., at meeting of the National Safety Council.

studying and development of accident prevention, rather than in the stirring up of a momentary furor of questioning, investigating and recommending, after a serious accident has occurred. Of course, they take steps to prevent a repetition of the same type of accident, in so far as their individual and limited experience will permit. But as the causes of accidents are many, these people are always one step behind their troubles, for they make no organized or sustained effort to anticipate their accidents. They are like the mother who is always ready with castor oil when her children develop stomach ache, but who makes no effort to prevent them from eating green apples. Truly, an ounce of prevention is worth more than a pound of cure.

Reasons for Lack of Interest in Safety.

It is to reach the executive who has given little constructive thought to the subject of accident prevention that this paper is presented. Let us first consider some of the most common reasons and objections advanced by those who have not as yet recognized the value of the safety movement.

1. Some cotton mill managers fail to realize that better safety methods mean greater production efficiency. Yet these same men become alarmed if their labor turnover increases. They know full well that inexperienced employees mean poorer quality and lower production. But, they also know that their experienced employees who leave, may sometime return. Unfortunately, however, those who leave by the route of the cripple or undertaker, never return. Accidents increase labor turnover, and hence affect manufacturing costs adversely.

2. Other managers feel that the development of safety first is too expensive. Such a conclusion ought not to be reached without a fair trial. Systems, like investments, should be judged by the security of the principal, and the dividends paid. Conclusive proof is at hand to show that the safety movement is a sound investment, and that it pays good dividends. Surely, a system whose principal is safe, and which yields excellent returns, can scarcely be termed expensive.

3. To others, it is something vague and indefinite. They have not tried to analyze it or become acquainted

with the methods of stimulating its development. And because their attention is concerned on routine business, they continue to ignore it.

4. Again, there are those who hold an almost unbelievable view, which I have heard expressed on two occasions. These men said that they did not desire to have their hazards emphasized or pointed out to their employees, because they believed that it would accentuate the dangerous act in their workers' attention, and would appeal to their sporting instinct; thereby tempting them to accept the dare, and take a chance, just to prove that they could beat the hazard. The policy of these employers is to ignore the hazard, and trust that the employee will do likewise. However, experience teaches us that the majority of our accidents are the direct result of ignorance. Therefore, this train of thought does not solve the problem.

5. Finally, we have the executive who has equipped his machinery with every conceivable safeguard, only to find that accidents still occur. Thinking that he has done all that is possible, he becomes discouraged, and lapses into apathy toward the movement. He fails to realize that the major portion of achievement in accident prevention is possible only by enlisting the active

DUPLAN SILK CORPORATION COMMISSION DEPARTMENT

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SIZE Your

RAYON

New York Office
135 MADISON AVE.

Southern Office
JOHNSTON BUILDING, CHARLOTTE, N. C.

Mills at
HAZLETON—DORRANCETON—NANTICOKE, PA.

No manufacturer will admit it...



*but neither will any deny this
business truth resulted from a
bit of justifiable business ego~*



—proven!

What a few textile manufacturers say about trademarking with Kaumagraphs:

Hess, Goldsmith & Co., New York City, write: "We recognize that the use of transfer marked merchandise advances its salability and protects the customer against substitution. We always endeavor to bring to the attention of our trade the fact that our goods are trademarked on the selva and that the customer should look for the trademark as a matter of assurance."

Davenport Hosiery Mills, Chattanooga, Tenn., writes: "We have used your Kaumagraph transfers for the past five years and believe they are far superior to any method we know of for trademarking and identifying our product—Humming Bird Ladies' Silk Hosiery . . . as a result, danger of imitation or substitution of our product is practically eliminated."

Hopeville Manufacturing Co., Worcester, Mass., write: "Every piece of goods before leaving the mill is thoroughly examined and is stamped with a Kaumagraph transfer with our trademark 'Hopeville Mills.' Any piece of goods which does not come up to standard does not receive this endorsement. This assures our customers that each piece of goods has received inspection and has passed as up to standard. It also permits us to protect our standard by attaching our trademark. We consider it very good advertising and good protection at a very small cost."

IT was hard to prove the business wisdom of the idea. And textile manufacturers wanted to be shown. To trademark wasn't, they admitted, much trouble or expense. But why bother about it at all?

But the Kaumagraph Company firmly believed that the textile manufacturers who trademarked his products was giving his products a plus value. The trademark was a silent guarantee of faith in his own product; an assurance of quality. And Kaumagraph maintained that customers would appreciate such guarantees.

But—it was a hard thing to prove. And most manufacturers wanted to be shown. Here and there a few more won over to the idea, not because they believed it would build their business, but because they wanted to see their trademark on their product.

Imagine their surprise when they felt an actual increase in their business resulting? They found it an excellent, economical way to advertise. Old customers expressed their appreciation. New customers were actually attracted to buy trademarked goods.

Within a few years, the proof that had been lacking was available. Other manufacturers began to realize they were overlooking a business bet. Today, it is hard to find a textile manufacturer who does not trademark his goods—and trademark with Kaumagraph.

For if a trademark is worth applying at all it is worth applying well. The Kaumagraphed trademark is applied in two seconds with a warm or heated iron. It is a bright, neat mark; a mark that will neither smudge nor discolor. If you are not yet trademarking with Kaumagraphs, write at once for sample markings.

KAUMAGRAPH COMPANY

Established 1903

7 E. Third St.	-	-	-	Charlotte, N. C.
New York		Boston		Chicago
Philadelphia		Paris, Ont.		Paris, Fr.



Cotton Mills a MILE HIGH!

Piled one upon another, the hundreds of mills using Jordan Precision Bobbins could form a structure too incredibly vast for imagining!

From this gigantic industrial group pours the main stream of America's torrents of cotton textiles. Our accuracy in bobbin-making assures one essential factor of that hugeness; and that is the certainty of production going on unhampered by the least fault or flaw in the bobbins.

These mills would never have chosen our bobbins, if money could procure more certainty or greater precision.

JORDAN Manufacturing COMPANY

Roughing Mills in the
hardwood belt of Tenn.,
N. C. and Ga.

Finishing Mills at
Johnson City, Tenn., and
Monticello, Ga.

Main Office:
MONTICELLO, GEORGIA

Jordan Precision Bobbins

interest and co-operation of the foremen and employees themselves in the work.

Need of Education Along Safety Lines.

Each individual worker sees a serious accident so seldom that he is not aware of the magnitude of the problem. And as some measure of carelessness or indifference is found in almost all of our employees, the good obtained by safeguarding our inanimate machinery, is far overshadowed by the harm caused by the lack of safeguards for our human machinery. The best safeguard for the latter is enlightenment of the individual by education along safety lines. And no effort at safety can approach more than partial success unless this is accomplished.

But, if we educate our employees in the safe way of doing things, and if we keep up their interest in safety, the most difficult part of the desired result will have been accomplished. We will have provided the worker with a guard which he will carry with him everywhere, and which will either protect him entirely from accident, or which will prevent his trivial injuries from becoming serious.

Much real progress can be made by merely a change of attitude on the part of the management, and with very little money expenditure. Any industrial executive will listen, if he can be shown a way to make additional savings. But, prior to last year, our textile section had not offered conclusive proofs of the value of safety in our own industry. In talking with textile manufacturers, we have not had sufficient facts and figures to quote from textile mills, but have had to depend upon the accomplishments of the steel mills, the oil companies, the railways, and the chemical concerns. Unfortunately, their hazards are not comparable with those of the textile industry, and, therefore, textile manufacturers, as a body, have shown only passing interest. What they have wanted to know was just what was being done in the textile mills.

However last year the first compilation of figures was published, showing the causes, frequency and severity rates of accidents, and the loss of time from work caused by injuries occurring in 17 representative textile manufactories. Another such list has just been made public for the present year, and includes 21 textile concerns. It is our hope to be able to publish a greater number of similar analyses each year, so that comparisons from year to year between textile mills will be possible. This will, of course, offer an excellent opportunity to demonstrate the value of safety when the figures of the mills having no organized safety movement, are compared with those which have.

One Plant's Experience With About 5,000 Employees.

And now, after considering the objections advanced by manufacturers who have no safety organizations, and, therefore, no accurate data on which to base their objections, let us consider what one safety organization has actually accomplished in a textile plant employing about 5,000 people.

Three and a half years ago, the Clark Thread Company, of Newark, N. J., manufacturers of Clark's O. N. T. Spool Cotton, undertook the launching of a safety campaign. There had been no sudden increase in the number of accidents, and conditions in this respect were very much as they had been during the past forty or fifty years. Most of the machines had been safeguarded, as was required by the State law; but accidents still occurred. At the inception of the safety campaign, we were unable to get any reliable information as to what we might expect from such an enterprise. We, therefore, proceeded very cautiously, preferring to make slow but continued progress. For, as I have just said, we had to find our own way, testing carefully each new step in the development of our organization.

We first became members of the National Safety Council as we believed this was necessary in order to have the experiences of safety committees in general. It offered us a bulletin service for the education of our employees, a consultation service for problems about which we were in doubt, and the "News" provided us with something tangible in the way of safety literature for our mill superintendents monthly. Without the guiding influence of the National Safety Council, we should have been like a ship without a rudder. Membership in the Council is necessary in order to keep any safety organization wholly efficient.

A Manager's Safety Council.

We then organized a Managers' Safety Council, composed of the company executives and the mill superintendents. From an analysis of the accidents occurring during the previous year, we learned that 86 per cent of our accidents were the fault of either the injured himself or of a co-worker. This was a real victory for the safety campaign because it at once located the real cause of the great majority of our accidents. We realized immediately that the foundation for the protection of our employees lay in enlisting their co-operation in the campaign.

Therefore, Workmen's Shop Committees were organized, consisting of three members from each department. These shop committees were held directly and entirely responsible for the condition of their departments as regards safety. We tried to instruct them in safety methods as best we could. They were given short talks on safety in general, and more specifically, on their individual departmental hazards. They were shown motion pictures, and were twice taken in a body to the State Department of Labor's Safety Museum in a city about ten miles distant. Bulletins were posted in glass-enclosed bulletin boards in a conspicuous place at every mill entrance. These posters were changed frequently, and at first consisted entirely of subject matter furnished us by the National Safety Council. However, we soon learned that many of our own accidents and processes of manufacture were capable of bulletinization. We

(Continued on Page 44)

HOUGHTON

Evolution, Labor Unions, Prohibition, Tariff, League of Nations

The above are a few of many topics upon which I have made so bold as to express my private opinion during the last year, in *The HOUGHTON LINE*, a little monthly publication which I nearly edit, for the sport of it, and which my Company publishes for the profit of it.

Chas. E. Carpenter,

Near Editor.

If you are not on *The LINE* Mailing List you are not up-to-date.

Every textile industrial executive and every fellow who hopes to be, is or ought to be on *The LINE* Mailing List.

All that is necessary is to send in your request, in writing, giving your name and address; the mill at which you are employed; the position you occupy and the kind of goods your mill makes and you will be *ON THE LINE FOR LIFE*.

Remember that there have been over a half million industrial executives request that their names be placed on *The LINE* Mailing List in the last 17 years, and there are still over 135,000 on the List. Evidence that it is wanted and appreciated.

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AND IN EVERY OTHER TEXTILE MANUFACTURING CENTER OF THE WORLD

Oils and Leathers for the Textile Industry

More Automatic Cotton Manufacturing Needed

OWING to the conditions of the times, and its effect upon the cotton manufacturing industry, one of the remedies for the existing condition of things would seem to be to employ more automatic machinery. There is yet in some mills a large number of non-automatic looms in operation. No mill can afford to run non-automatic looms and compete with other mills making the same line of goods on automatic looms.

Other places also must be attacked in our mills to reduce the cost of manufacturing. How about automatic roving frames? There are roving frames made, and some are now in operation which are equipped with stop motions to prevent the making of single roving. Why not extend the stop motions so that same form of same may be applied to all roving machinery to stop the machine when an end breaks. As a roving machine must be stopped whenever an end is down, and whenever an end is running single, it might as well be stopped automatically as to have to be stopped by hand. Putting the matter up in another way—what is the use of paying a hand to sit by the hour watching a pair of speeders, or intermediates or jacks? All that the attendant is needed for is to creel and piece up ends, and to doff, oil, clean, and occasionally pull off some single roving. If the machines were

By H. D. Martin.

fully equipped with stop motions to prevent single and also to stop the frames when the ends break, the skilled hand could be kept busy with creeling and piecing ends on more frames. It would not be necessary for them to watch the frames. The cleaning, oiling and doffing should be done by lesser skilled help. The skilled hands should only be employed for the part of the work requiring skilled attention. A great saving could be brought about in this way, because a skilled speeder tender could look after twice as many frames as they now do. Where hands run two roving machines each, they could operate four machines. And where an operative now takes care of two or three jack frames, the same operative could handle four or six frames. This would be a big step forward toward reducing the costs in the carding departments of our mills. The stop motions for the creels are already available, I believe, and the end-down stop motions is as easy to devise, or a modification of those used on spinning frames could be adopted.

Our spinning frames can also be equipped with stop motions in the same way. These are already available. If the spinning frames were

thus rendered more automatic, the spinners could also do a great deal more work. As it is now, a large part of a spinner's work is to "un-bung" ends. That is, they must remove steel roll laps, scavenger roll laps, or top roll laps. They are expected to oil and clean, and watch the frames. The skilled spinners should not be expected to oil nor clean. If stop motions were applied, they would never be obliged to pull off roll laps of any kind. If cheaper labor were put on to oil and clean, the expert spinners could, after all of these new conditions were brought about, operate, instead of 6 to 12 sides or more, they could attend to 24 or 48 sides and more. They would probably not work any harder, earn a little more and enjoy their work even a great deal more. But the mills would greatly reduce the cost of spinning. It would cut down the cost of spinning almost in two. The same way with the operation of the roving frames.

Again, a great deal could be done along the line of automotive transportation of empty bobbins. All empty bobbins should be self-conveyed back to the point of re-employment again. The writer had a large spooling department arranged with empty bobbin conveyors, and

it worked well. Also a quilling room. Conveyors can be arranged either overhead or under the floors. Chutes can be erected whereby the bobbins can be raised to the overhead conveyors or to the conveyors underneath. Then, in either case, all empty roving bobbins and likewise empty spinning bobbins can be self-conveyed to the place of re-employment again. Little or nothing has been done along this line, and yet nothing can be more simple to arrange and to pay for itself so soon. In all department stores of any account, there are self-carrying systems to carry cash from one cent up, to the office from all points. An empty bobbin costs anywhere from about four to fifty cents each, depending on the size and the quality. Spools could be self-toted the same way. Spools now cost anywhere from 16 cents to 40 cents each. And yet all of the things are tossed around, when empty, like so much chaff. The account of broken bobbins and spools in a mill is abominably large. All because of the rough usage of our present day transportation system. It is common to see hundreds of empty bobbins on the floors of many mills. If they were nickles, dimes and half-dollars kicking around, we'd all fall over ourselves to gather them in. And yet empty bobbins on the floor represent about the same cash values,

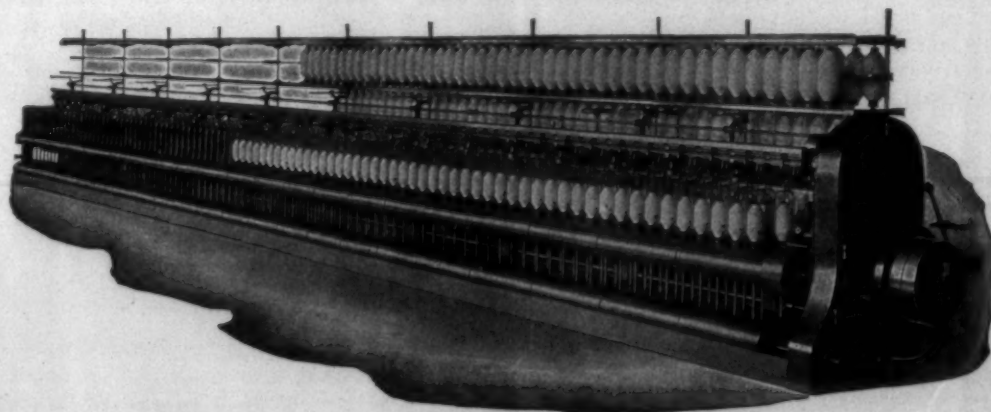
(Continued on Page 32)

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COTTON MACHINERY

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Mathieson Synthetic Ammonia

IN our Ammonia plant at Niagara Falls the two gaseous elements, Nitrogen and Hydrogen, are combined by our synthetic process to form Ammonia (NH_3). This combination cannot take place unless the nitrogen and hydrogen gases are absolutely pure. The resulting Mathieson Anhydrous and Aqua Ammonia is therefore the purest Ammonia obtainable—a triumph of modern science.

The increasing demand for Mathieson Synthetic Ammonia has caused us to install several new manufacturing units at our plant, to be placed in operation this fall. This added production and our growing distribution facilities throughout the country are an assurance of continued prompt service to our Ammonia customers.

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*Caustic Soda ~ Liquid Chlorine
Bicarbonate of Soda
Anhydrous Ammonia*



*Soda Ash ~ Bleaching Powder
Modified Virginia Soda
Aqua Ammonia*

Deal Direct with the Manufacturer

Need and Value of Safety

(Continued from Page 10)

find that these home-made posters carry a greater appeal to our workers because they depict occurrences in our own mills.

The shop committees made frequent regular inspections throughout their departments, and forwarded to the Managers' Council their recommendations for the prevention of accidents. They also investigated every serious accident, and filed with the Managers' Council a written report containing their findings for responsibility, and their recommendations for the prevention of similar accidents.

The council met once a month, at which time these recommendations and reports were considered, and the necessary changes made.

This has all grown by gradual steps into a most vigorous and successful safety organization. Numerous ways and means have been devised for maintaining the interest and enthusiasm of our workers. That their enthusiasm has been kept at a high point is proven by the remarkable record established by our organization.

It may be of interest to study our frequency and severity rates—computed by the National Safety Council's method:

By major accident, we mean an injury involving a permanent disability, or one which necessitates loss of time in the shift next beyond the one in which the accident occurred.

Expressed in another way, the actual number of our injuries has

Number of Major Accidents

These figures show a remarkable decrease, which is still more impressive when one considers that our accident rates for 1921, at the start of our campaign, compare favorably with those of several mills which have recently engaged in safety work, and whose records are available. The improvement has been made in a mill where safeguards and ordinary safe working conditions had been in existence for years. But these are insufficient.

It must be remembered that these rates are based upon the actual number of working hours during which the employees were exposed to hazards. Therefore, no further correction is necessary for those periods of depression which occur in manufacturing, except as it may influence the actual number of injured, and this variant is very small in proportion to the total exposure.

Figures such as these show that

it is possible to save many of our employees from painful and often crippling injuries, if we will only use all of the means at our disposal. We feel that by means of our efforts we saved at least 100 of our employees from suffering and misery last year. Is this not worth while?

	1921	1922	1923	1924	1925
Number of Major Accidents	157	120	29	16	2

If the case of a worker who, through accident or illness, has been brought to dire want and distress is called to the attention of an employer, it is very likely that he will render aid until the needy one is able to care for himself. How much more logical it is to care for our employees before they are injured, by keeping them sound, and on the job at normal weekly earnings; for our compensation laws provide payment for a sum totally inadequate to care for the average family. We, therefore, feel that we have rendered our employees a real service.

And the company has also profited materially. If we divide our major injuries into three classes for the purpose of further study, we will find the following figures of interest:

	1921	1922	1923	1924	First 8 Mos. 1925
Involving No Compensation	52	45	11	3	0
Involving Temporary Compensation Only	100	65	12	7	2
Involving Permanent Compensation	4	10	6	6	0

Compensation Payments.

There is a ten-day waiting period in the New Jersey law which makes this possible. But the Clark Thread Company does not observe this in accidents, other than those specified above, and it pays full wages for the first ten days in all other cases. The company's saving in the number of cases involving temporary compensation is manifest. The number of permanent compensation cases is not a true index of these injuries. They are in proportion less than in 1921, but are made to appear larger by a revision of the State Compensation Law. This law has been made more stringent, and rightly so, until every case of stiffness, loss of motion, function or strength in any part of the body is now classified as a permanent disability. And such disabilities must be compensated for in the proportion they bear to the total for the injured member. There is a growing tendency to see that the workman

(Continued on Page 27)

	1921	1922	1923	1924	First 8 Mos. 1925
Frequency Rate Major Accidents	18.29	12.56	3.01	1.79	.43
Severity Rate Major Accidents	2.08	1.488	.679	.161	.019



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Boil-Off Oil

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Monopole Oil

Reg. U. S. Patent Office

Gives penetration—more level dyeing and increases the lustre. Prevents resist spots from lime soaps, when water conditions are not just right.

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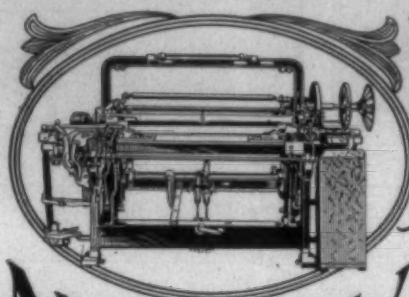
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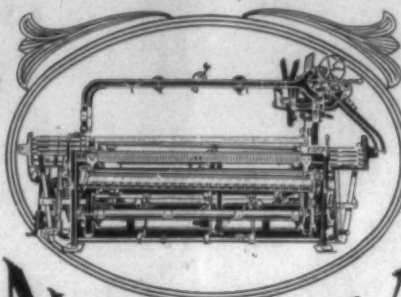
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"We were recently asked if our FEELER is all right for RAYON. We sent experts to report on two mill installations and found them perfectly satisfactory, a condition confirmed by a letter later received from the President of one of the mills. We do not need to bring out a new Feeler; ours is just what it always was—good for any service required."

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Practical Discussions

By

Practical Men

Speed of Card Cylinders.

Editor:

Why have card builders and cotton manufacturers settled on a speed of 165 revolutions per minute for all makes of carding engines?
 Carder.

Warper Production.

Editor:

I have noticed lately in your paper and others, comments on slow speed against high speed for warpers, but I understand that some mills are getting very good results from high speed warpers. I would like to hear from those who are getting a good production from highly speeded warpers and to give us some interesting figures on this.
 Va.

Soft Roving.

Editor:

Please allow me space to ask the following questions:
 We have trouble with our speeders making soft roving. I mean soft bobbins when they are full. The spinner says he cannot spin the roving. We have old Lowell frames making 3.80 and 4.80 hank roving. We keep our cone belts in good shape at all times. The only way we can make good, firm roving is to run a tight tension and that seems to stretch the roving until we have two numbers variation in the yarn at times. Can anyone give us a remedy?
 Night Carder.

Answer to Designer.

Editor:

Your proposition is a unique one. It has puzzled many other designers until they have found out a few things about colors, colored yarns and color matching, also constructions of goods.

The proposition of matching one cloth with another when made of the same colored yarns but of a different construction is an unknown quality for sure. Nobody has ever done gone and done it. And they ain't going to do it, either. The reason is this, that the more colored yarn you crowd into a square inch or into any other given space, the more radiation of that colored will be given out, and vice versa. It is like putting in four lumps of sugar in your coffee—it will be sweeter than if you put only two lumps in it. Two lumps give more light than one, etc. Now I guess you will understand your puzzle. In order to match the new cloth against the old

cloth, you will have to re-dye those same yarns, and you probably will not hit it right until you have made many tryouts. But you will have to comfort yourself with the old slogan, "If at first you don't succeed, try and try again!"
 Done It.

30s Yarn From Single Roving.

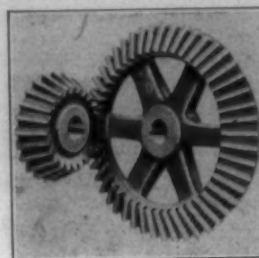
Relative to the discussion about the English mills making 30s hosiery yarn from single roving, I will say that it can be done right here in the South and done as well as the English mills do it. Here is the plan to make it:

Install a large type opening machine with porcupine beater in the opening room and then use the hopper breaker machine attached together with a small vertical opener built inside the machine where the porcupine beater is now being used. Then take it to the intermediate machine and then the finisher. Make a 12-ounce lap every 10 to 12 minutes and card it medium slow, then put it through three processes of drawing frames, then to the small size slubbers and from there to the roving machine instead of to the large sized intermediate. Then take it to the small jack frames, then to the spinning and you can make a nice 30s yarn, as good as the English spinner can make.
 J. H. A.

Answer to Old Style.

Editor:

Having a proper system of conveying the power to the machinery counts for much toward increasing the earning capacity of a plant. This point is too important that the verification of the statement is amply proven in the course taken by many mills during the past few years. Never before in the history of textile manufacturing have so many mills rearranged the power driving arrangements of their mills, as they have during the past decade. They have found that the vast outlays made for power improvements have been fully justified by the saving which was brought about. And many more mills could well afford to improve their driving arrangements. The troubles and costs involved by antiquated driving arrangements are enormous. It costs money to drive long lines of heavy shaft and excessive counter shafts, over-tight and over-slack belts, and keeping the system in proper repair, lubrication, and cleanliness. Many mills have re-arranged the machinery so that a single line of shafting has taken the place of dozens of counter shafts, and done away with the



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Write us for a Sample and Prices

THE DENISON MFG. CO.
ASHEVILLE, N. C.

Established 1915

counter belts. One mill found that by equipping its shafting hangers with roller or ball bearings, they reduced the friction load over 25 per cent. This mill was considering the installation of another steam engine, at a great expense, as they were short of power. But, instead of spending money for a new engine they equipped their plant with roller bearings, and found afterwards that they had power to spare. These new bearings also saved oil, and the wear and tear of belts and machinery. Another objectionable phase of the various antiquated driving plans as used for decades past among mills, is the inconvenience of excessive belt boxes or belt enclosures. It costs money to truck goods around belt enclosures which come up through the floors here and there, also for the help to "duck" their heads in order to pass under various inclined belts which are stretched across alley ways, etc.

Still another serious objection to the old fashioned drives is the fire hazard which is involved. Many mills have had serious fires, and others have been completely destroyed on account of the fires which have commenced at one end of a belt box and then been fanned through the wooden belt enclosures to destroy more property throughout the mills. Therefore, many mills have installed electrical drives and reduced all of the equipment possible, also the friction together with costly inconveniences, and are today on a much better earning basis. It will pay any mill to study well the disadvantages of their old driving arrangements as against the greater advantages of the modern drives, and weigh the differences in their favor. After having eliminated the frictions inconveniences, fire hazards, also the bulky equipment and reduced all to a minimum, there is also brought about a more continuous driving of the machinery. There is also a great saving in the lesser amount of equipment to be oiled, cleaned, repaired, and watched to prevent fires and breakdowns.

Power Man.

Experience With Rayon

Discussing the weaving of rayon, and the difficulties involved, can go on indefinitely. One mill man who has had a great many years of experience, and who is very highly regarded for the work his plant has turned out, was met by another mill man who has not had much education along these lines.

"I hear you have a secret for eliminating 'shiners' and other weaving imperfections in the use of rayon. I'd like to find the secret out if there is some way," said the newcomer.

"As a matter of fact," the mill man said, "referring to this incident, we have no secret about eliminating or minimizing shiners. The extent of perfection which we have attained is the result purely of our long experience and study. I do not believe that we can help another mill man materially by showing him what we are doing. Personal experience alone, through the particular problems that arise—that is the

only way in which success in weaving rayon can be attained. We believe that geographical location is an important factor. As much as possible this has a bearing on atmospheric conditions to some extent. Everyone who is handling rayon knows the influence of atmosphere on the handling of rayon."

Opinions differ greatly as to the causes of the same troubles in the handling of rayon. Moreover there appears to be numerous instances where cloth weaves may seem perfect, but react unfavorably when processed by the finisher. — Daily News Record.

Patent Increases Humidifier Efficiency.

Patent No. 1,540,335, issued June 2nd to William B. Hodge, of Charlotte, North Carolina, discloses the very novel method of utilizing an unconfined air draft for greatly increasing the evaporative capacity of a humidifier, and to also produce a discharge of the spray in a flat, horizontal plane.

While this new device is built somewhat along the lines of older humidifiers, yet several details of construction have been worked out so completely that the effect is increased capacity and distribution of the spray are decidedly marked and novel.

This patent has been assigned to Parks-Cramer Company, and the device will be marketed along with their other products.

Ponzol Brilliant Green G Paste.

The dyestuffs department of E. I. du Pont de Nemours & Co. has just placed on the market their new vat green, Ponzol Brilliant Green G Paste, which produces on cotton, shades fast to chlorine, washing and light.

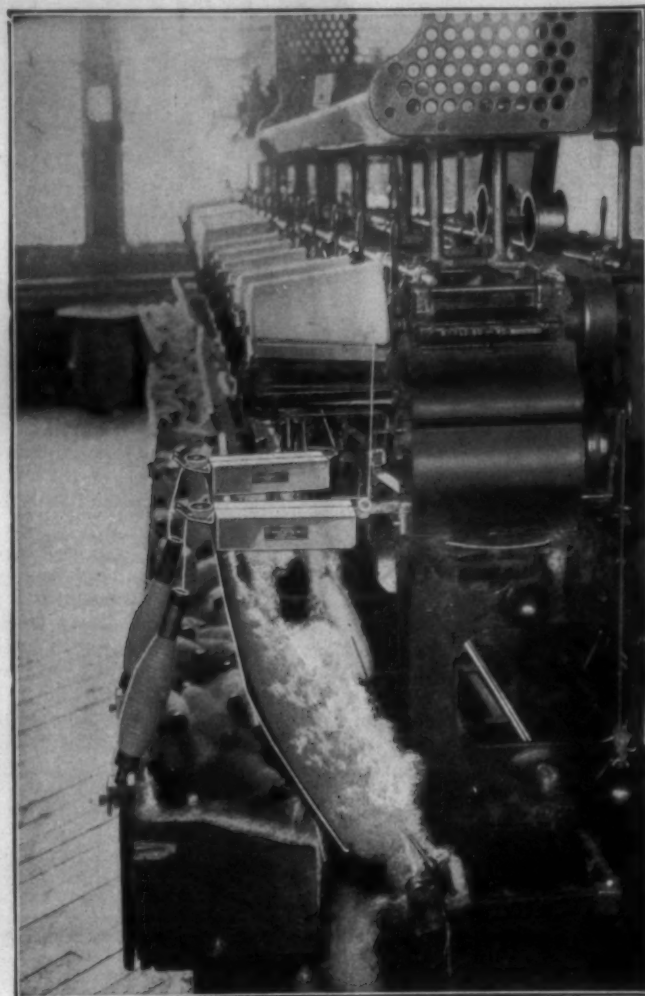
By combination with other colors of the vat series possessing similar exceptionally good qualities, it is possible to produce a series of bright greens from the bluest to the yellowest tones.

This product is suitable for cotton goods in any stage of manufacture and is especially desirable for such materials as shirtings, toweling and dress goods which require good fastness to chlorine, washing and light. It can be applied to piece goods either on the padder or the jig, and when properly applied is useful for silk and rayon.

E. I. du Pont de Nemours & Co. have announced through their dyestuffs department, the addition of two new basic colors to their line, Du Pont Rhodamine 6GDN Extra and Du Pont Rhodamine 5GDN Extra. They are offered especially for the printing trade for bright yellowish pinks on wool, silk and cotton.

They are particularly recommended for color discharge work on all fibers, as they are unaffected by this discharge process, and retain their brilliancy.

They are also offered for dyeing bright yellowish pinks on silk, rayon, cotton and wool. On silk they display a pleasing fluorescence.



The Truth About Slubs

It does not require inventions to make slubs, but often they are made, and that is another story.

We wish to tell you that the Eclipse Automatic Yarn Cleaner is sure death to slubs. The Eclipse Cleaner not only catches all the slubs but thoroughly removes all the dirt in the yarn.

Many knitting mills and spinning plants realize the extreme value of the Eclipse Cleaner, and are equipping their entire winding capacity with the Eclipse Cleaners. The basic principle of good knitting and weaving is thoroughly clean yarn.

Why make yourself believe you are getting the best results when you can absolutely improve your yarn with the Eclipse Cleaner.

The Eclipse Cleaner is easily attached to your winder. It does not add any additional cost to your winding costs. Upon request we will cheerfully give you a demonstration.

Eclipse Textile Devices, Inc.

Elmira, N. Y.

Makers of

Automatic Yarn Cleaner, Automatic Stop Motion, Yarn Tension Device
Eclipse Van Ness Dyeing Machine

Seeing Georgia Mills

By David Clark

I HAD hoped to spend all of the first part of the week of the Southern Textile Association meeting visiting Georgia mills and had an invitation to make the trip with Guy Melchor in his car, but was prevented by other engagements from leaving until Wednesday night.

I wired Guy Melchor Wednesday afternoon, but he was already on the road, and not getting a reply I took a sleeper through to La Grange, Ga., and reached there at 8 a. m. Thursday.

About 9 o'clock I took a taxi out to the Elm City Cotton Mill to see Ira Grimes, but was informed that he was at the uptown office. I waited for almost an hour and was just leaving when he drove up.

Mr. Grimes is a son of a man who was one of the best known and most successful superintendents in the South in former days, and his two brothers, M. T. and O. D. Grimes, are now superintendents, the last named being at present president of the Southern Textile Association.

Ira Grimes came to the Elm City Cotton Mills when they were being built nineteen years ago and has been in entire control of the operation of the mill since that time.

That he has been a competent and efficient superintendent is evi-

denced by the fact that present financial statement reads almost like a Federal Reserve bank statement.

We saw the Elm City statement published some time ago, and if our recollection is correct, they had enough cash and Government certificates on hand to purchase a year's supply of cotton without borrowing a dollar, and in this connection it must be remembered that they chew up a big lot of cotton, because they are making heavy duck from very coarse yarn.

We have often heard it said that the only way to make money on a cotton mill was to make one line of goods and to drive away week after week on the same goods until they could be produced at a low cost and upon an economical basis.

The Elm City Cotton Mills and all the other mills in the Callaway group which, has been one of the most successful groups in the South, disprove that theory, for they take any kind of order, even as low as five rolls of a special cloth, provided the price is right.

With 11,200 spindles and 129 looms it is nothing unusual for them to be making thirty different fabrics at the same time, and not only do the fabrics change, but in fabrics of similar count there is often a difference in the yarn twist, as the goods are to be used for different purposes.

It is a man's size job to run a mill like the Elm City, but Ira Grimes seems to handle it with ease and he has certainly been very successful.

We went through the mill with him and were much impressed with its operation.

I have for many years been an advocate of one process slow speed drawing and was glad to find that Mr. Grimes had, after careful investigation, adopted that system. He stated that he was getting fully as good results from one process.

He had adopted the combination wind instead of the filling wind on his warp yarn and was much pleased with the results. The combination wind starts with about a five-inch traverse at the bottom of

the bobbin and the traverse, while remaining the same, gradually moves up the bobbin, thereby building a long bobbin with the spinning advantage of a short traverse.

On his spinning frames he had brushes with stiff bristles fastened to the belt shifters so that the bristles just touched the inside of the belts and kept them clean at all times.

The Elm City Cotton Mills are now building a new cloth room and will use the space of the present cloth room to install additional duck looms which are to be moved from the Hillside Mills.

Unity Cotton Mills.

After spending about an hour with Mr. Grimes, he drove me over to the Unity Cotton Mills and I visited the superintendent, Jas. Newsom.

Mr. Newsom has been a regular attendant at Southern Textile Association meetings and is recognized as a very close student of cotton manufacturing problems.

He was formerly superintendent of a mill at Columbus, Ga., but came to the Unity Cotton Mills about nine years ago and has made good.

The Unity Cotton Mills is the second oldest cotton mill in La Grange, but is in splendid condition,

It Helps to Boost Profits— SLIP-NOT

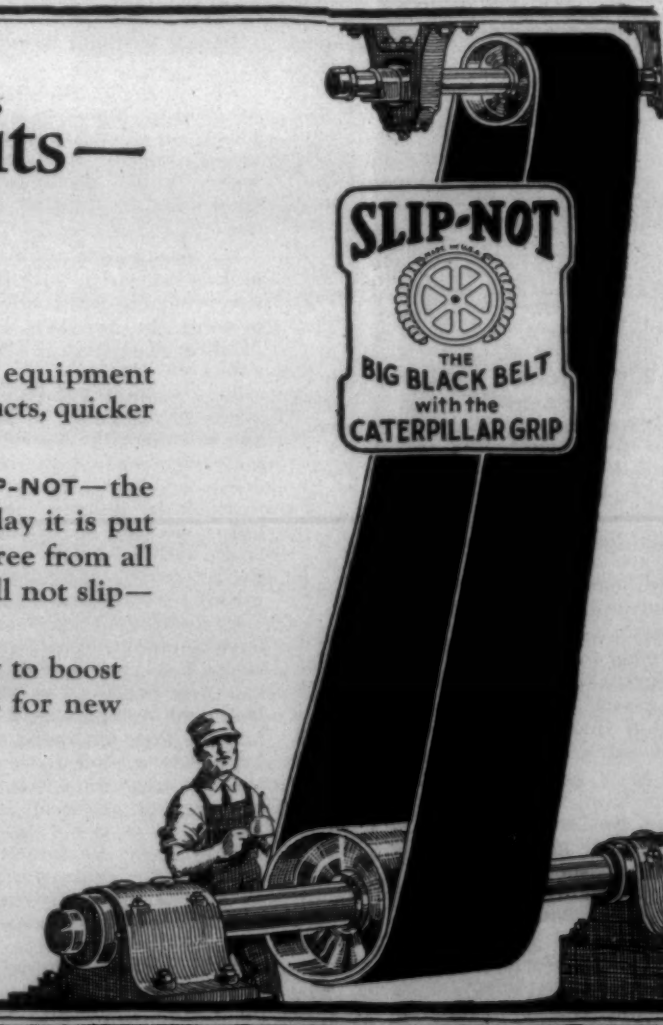
EVERY mill or plant executive appreciates the part that good equipment plays in boosting profits. Such equipment assures quality products, quicker production, fewer delays and smaller overhead.

There is no finer equipment for transmitting power than SLIP-NOT—the big black leather belt with the Caterpillar Grip. From the very day it is put into service its perfect surface assures 100% pulley contact. It is free from all objectionable stretch—delivers more power with less tension—will not slip—withstands the harshest treatment—and is entirely waterproof.

All of which means that SLIP-NOT helps in a very definite way to boost profits. You will do well to remember this when the need arises for new belting.

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SLIP-NOT BELTING CORPORATION
KINGSPORT, TENNESSEE



and like all Callaway mills, has the kind of financial statement that makes bankers smile.

We went through the mill with Mr. Newsom and were especially impressed with the cotton ageing chambers.

He has built four large rooms of concrete and the cotton, after passing through vertical openers, drops into these chambers and is allowed to age, after which it is taken out through doors and put into the hoppers.

This ageing allows the cotton to fluff out and become uniform in moisture.

The English have always used ageing and mixing bins and that is why they can make high grade yarns from single roving.

Very few English mills use double roving for yarn under 40's and they thereby save from one-half to three-quarters cents per pound on their manufacturing costs.

Although the English make high class and strong yarns from single roving and have been running at least 25,000,000 spindles on that system for many years, American superintendents say that it can not be done, and in many mills the extra expenditure for double roving is several times the salary paid the superintendent who can not do the thing that is being done by English superintendents.

The extra cost of double roving would in a very short time pay for concrete ageing chambers such as have been installed at the Unity Cotton Mills at La Grange.

The Unity, being on very coarse yarn, is, of course, not concerned with the double roving problem.

In a mill such as the Unity Cotton Mills, where they are forever changing duck numbers, it requires a very large number of spools to take care of the various plies and numbers and I found that at the Unity Cotton Mills they actually untwisted yarn.

An order using 12-3 being completed, the spools are put on the twister creel and the twister process being reversed the yarn is run on other spools.

With these "three ends up" spools it is a simple matter to add one or more ends when heavier plies are needed or to twist again with the required twist when 12-3 is needed.

Mr. Newsom had his mill in good running condition and I enjoyed the hour spent with him.

Finding that I wanted to go to the Dunson Mills, he very kindly drove me there in his car.

The Dunson Mills.

When I entered the office of the Dunson mills, I found that W. Sanford Dunson was engaged with a man whom I afterwards found to Mr. Metz, vice-president of the New York Banking and Trust Company.

Very soon Mr. Dunson came out to answer a phone call, and seeing me, invited me in to meet Mr. Metz and then invited both Mr. Metz and myself to take lunch with him at the Country Club.

Before leaving, however, Mr. Dunson took us over the Dunson Mills.

I had visited this mill several years ago when the delegates to the

World Cotton Conferences at New Orleans stopped at La Grange and had always remembered it as one of the best equipped mills I had ever seen and it made a similar impression upon me this time.

Prior to building the Dunson Mills, the Dunson family had for a number of years operated the Dixie Mill at La Grange and knew exactly how a duck mill should be equipped.

The Dunson Mill makes a wonderful impression upon a cotton manufacturer, because everywhere there is the best of equipment and efficiency.

Under the management of Sanford Dunson and his brothers it has been very successful. They have recently added 10,000 spindles and machinery has been ordered out for another 10,000 spindles, which will give them a total of 42,000 spindles and completely fill the addition which was built last year.

Leaving the Dunson Mills about 12:30 o'clock, we went to the Country Club, where we were joined at lunch by Joe Dunson, the banker member of the family.

I was very much surprised to find such a beautiful Country Club in a town the size of La Grange, but the explanation was that it was very largely supported by the Callaway group of mills, who have their own selling agency and frequently entertain the buyers of their products.

In addition to a neat and well built club house with many bed rooms on the second floor, there are two swimming pools and a nine-hole golf course which is said to be one of the sportiest in the South.

It is the course upon which Sam Rakestraw and Britt Robinson learned to play the game, which enables them to win the Southern Textile Association golf prizes.

After lunch Sanford Dunson drove me back to town and I secured a ticket for the three o'clock bus for Columbus. Just before the bus left Fred Haefer, of the Parks-Cramer Company, showed up and made the trip with me. We reached Columbus about 5:30 o'clock.

Columbus Manufacturing Co.

On Friday afternoon after we had returned from the trip to Camp Benning, I received an invitation from George Murphy, superintendent of the Columbus Manufacturing Company, to visit his mill and made the trip about 4:30 o'clock, accompanied by Bob Phillip, of "Cotton," O. D. Grimes, and others.

The Columbus Manufacturing Company has about 65,000 spindles, but impresses you as being even larger.

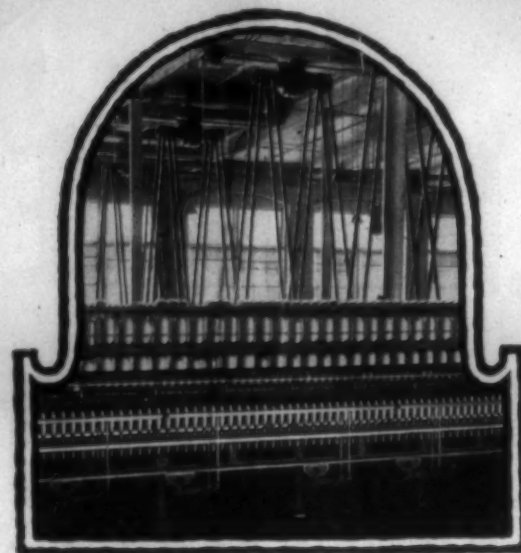
The new weave shed built in 1920 is one of the best I have ever seen and I have an idea that some day they will enlarge that weave shed and move all the looms into it.

George Murphy showed us over the entire plant and it was running first class and efficiently.

There is not much that can be said about a sheeting mill and they make nothing but sheeting.

I was much interested in a specially constructed sheet that carried the filling over to the weave shed and also with the slasher controls

(Continued on Page 27)



Steady-pulling Graton & Knight Belts

Stop that waste from broken ends and idle frames

THERE is a Graton & Knight Leather Belt standardized for spinning frames. Made expressly to maintain uniform spinning speed and do more and better work.

Belt one of your frames with it. Compare the results. You'll find its tough, clinging leather slips less. It has the proper weight and pliability for small, fast-running pulleys. Oil can't hurt it. Free from excessive stretch. No more shut-downs from belt trouble. You get steady, production-boosting transmission that only the right belt can give.

Three hundred thousand packer hides of finest quality are processed in The Graton & Knight Belt Leather Tanneries each year. This stock, plus controlled, standardized production, makes our prices, quality for quality, 5 to 10 per cent lower than the field.

Put your name on the coupon below. You will get definite information which specifies the right belt for over two hundred types of machines, covering fourteen industries where belt costs have been reduced.

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KNIGHT

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Standardized
LEATHER BELTING

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THE GRATON & KNIGHT MFG. CO., Worcester, Mass., U. S. A. 101-Q
Send belt information.


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Company.....

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Prices, quality for quality, 5 to 10 per cent lower than the field

Tanners—makers of belts, straps, packings, fan belts, lace leather, etc.



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MILL WHITE

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*"Save the surface and
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Cotton Mill Processes and Calculations

By D. A. Tompkins.

Copy Revised for Third Edition.

(Continued From Last Week)

One difference to be noticed about this frame in the type of differential motion used. It is an improved type of the Tweedoles Differential, which will be described later in detail. The top or bobbin rail of this machine supported under its center of gravity by a set of levers, thus relieving the slides and racks of this weight. Another peculiarity to be noticed is the Lay Gearing, which has two change places instead of one. This construction brings the change gears into a more convenient position and at the same time increases the range.

132. Another make of roving frame is shown in Fig. 31. This is the Woonsocket machine. A glance at the gearing plan will show several details that are different from the gearing of the frame previously described. This machine is equipped with the Daly Compound, which will be described later. Another noticeable feature is the chain drive from the differential to the bobbin shafts. The lifting shaft is driven from the center, another desirable feature.

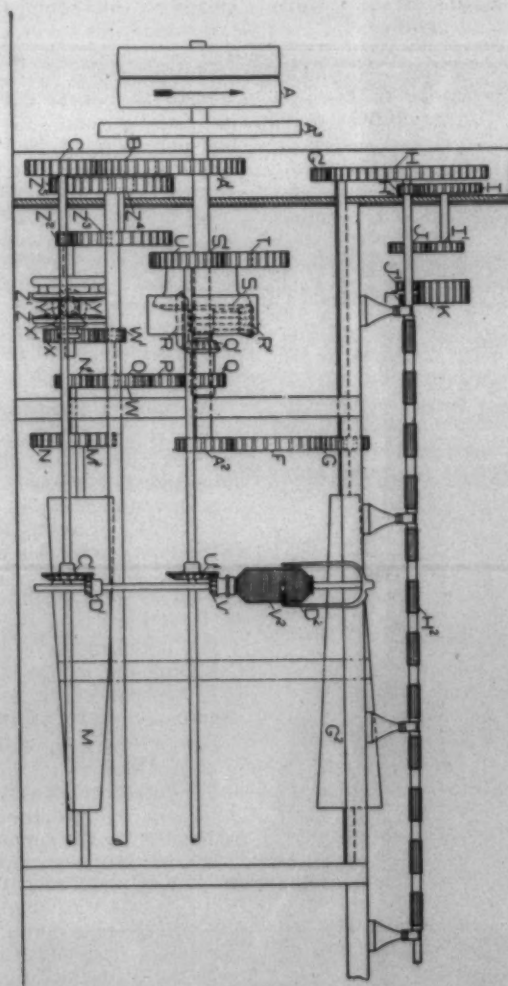


Fig. 30 (a)

Front Elevation of Head End Gearing—Roving Frame

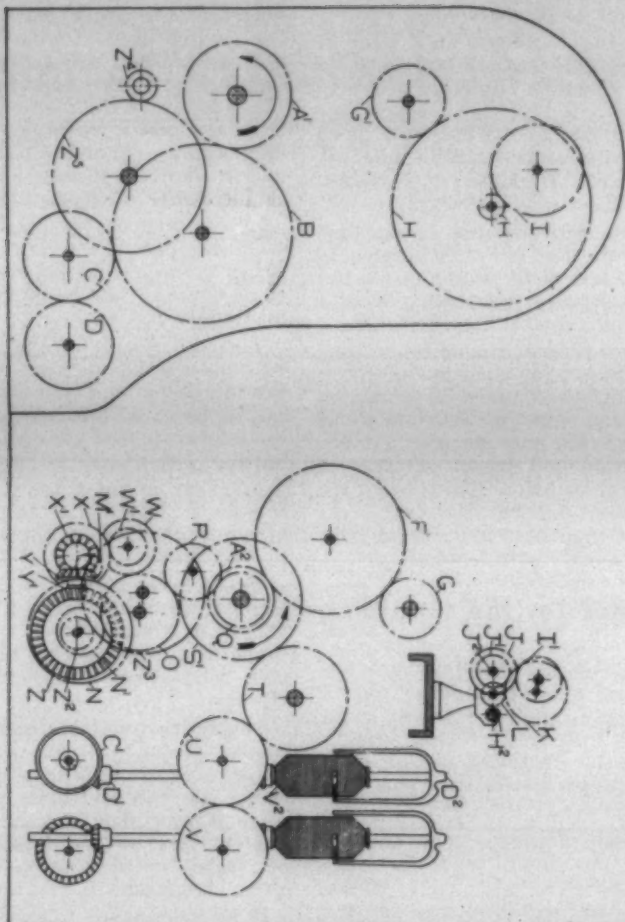


Fig. 30 (b)

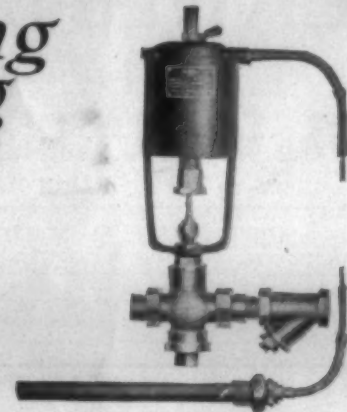
Elevation and Section of Head End Gearing—Roving Frame

The alphabetical references to drawings, Fig 30 (a) and (b) are as follows:

		Slub and Inter.	Roving and Jack
A	Driving Pulley, 16 in. diam. x 3 in. face		
A ¹	Spindle Shaft Driving Gear	40 T.	40 T.
A ²	Twist Gear, 20 to 70 T.		
A ³	Balance Wheel		
B	Spindle Shaft Intermediate Gear	75 T.	70 T.
C	End Back Spindle Shaft Gear	42 T.	37 T.
C ¹	Spindle Shaft Skew Bevel Gear	55 T.	55 T.
D	End Front Spindle Shaft Gear	42 T.	37 T.
D ¹	Spindle Bevel Gear	30 T.	22 T.
D ²	Flyer		
F	Back Intermediate Gear, 128, 120, 112, 104, 96, 88, 80 and 72 T.		
G	Middle Top Cone Shaft Gear, 32, 40, 48 and 56 T.		
G ¹	End Top Cone Shaft Gear	48 T.	44 T.
G ²	Top Cone, driving Bottom Cone		
H	Large Front Roll Gear	130 T.	130 T.
H ¹	Small Front Roll Gear	20 T.	18 and 20 T.
H ²	Front Roll, usually	1 1/4 in. dia.	1 1/2 in. diam.
I	Crown Gear	80 T.	82 and 120 T.
I ¹	Draft Gear, 30 to 67 T.		
J	Back Roll Gear	52 T.	52 and 60 T.
J ¹	Middle Roll Driving Gear	30 T.	27 T.
J ²	Back Roll, usually	1 1/4 in. dia.	1 1/2 in. dia.
K	Broad Top Intermediate Gear	70 T.	70 T.
L	Middle Roll Gear	20 T.	20 T.
M	Bottom Cone		
M ¹	Bottom Cone Shaft Gear, 14 to 36 T.: 16, 17 and 18 T. regular		

(Continued on Page 28)

Improving Slashing Process



Let your sizing get too cool and it "skims over," producing excessive chafing in the weave shed. Or, if too hot, it thins out and permits "creeping" of the slasher-roll coverings or "picking up" on the drying cylinder.

These, and many other sources of trouble, can be prevented by installing

Honeco Temperature Controllers

They automatically control the sizing temperature at all times. They are a positive assurance that your sizing will be maintained at the proper temperature. Honeco Controllers can not forget—cannot lay down on the job.

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D. H. HILL, JR.
JUNIOUS M. SMITH

Managing Editor
Associate Editor
Business Manager

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The Cotton Situation

THE recent Government report indicating a crop of 15,226,000 bales was a shock to the trade and has caused a decline of approximately three cents.

If there is any such crop in sight there must have been 46,000,000 acres planted and the farmers of the South have only themselves to blame if prices have gone below the cost of production.

Assuming that the 15,226,000 estimate is correct, which is still doubtful, we have a yield slightly in excess of the probable world consumption of American cotton, but if China and India find that the prices of heavy sheetings come within their ability to buy it is not improbable that the consumption of cotton will equal the yield.

A studied effort was made by the bears at the beginning of this season to create the impression that much smaller exports of raw cotton could be expected, but we predicted then that exports would be larger than last year.

Already exports are running ahead of last year and on Monday of this week broke all records with 267,000 shipped in one day.

The truth is that Europe and the world has been on short cotton goods rations for five years and with a steadily increasing purchasing power are going to consume more and more cotton goods.

The world's consumption of American cotton was approximately 14,750,000 bales in each of the pre-war years of 1912, 1913 and 1914 and a normal increase due to larger population of the world would bring that figure today to about 16,000,000 bales annually.

While it is true that rayon has been substituted for cotton to some extent, it is also true that in 1912,

1913 and 1914 the automobile industry was not large and that the consumption of cotton goods by the automobile industry is enormous today and has increased far more than rayon has been substituted for cotton.

When a market movement begins it often swings too far and with little incentive to buy cotton at this time the bears may be able to drive it to lower levels.

The most serious aspect of the situation as we see it is the fact that the co-operatives have, in many sections, advanced 15 cents per pound to their members, and some have secured that advance upon low grade cotton.

There are two ambitions that at present dominate the lives of the big cotton speculators, first, to get rid of semi-monthly cotton reports so that they can manipulate the market with their own semi-monthly reports, and second, to crush the cotton co-operatives which undoubtedly have been a factor in stabilizing prices.

With cotton at its present level it would only require a decline of two cents, or at most three cents, to force the bankers, who have advanced money to the co-operatives, to become uneasy over their loans.

There is no doubt that the big operators would gladly risk a large sum in a bear drive if they thought that such a drive would crush or seriously cripple the cotton co-operative movement.

The real question today is "What are the cotton farmers going to do next year?"

We believe that that question is going to have far more to do with cotton prices than the size of the present crop.

If the farmers are going to plant another 46,000,000 acres it is a certainty that cotton will go to 15 cents or lower, but indications of a sharp

reduction in acreage would send the price back to 25 cents.

After the 15,136,000 bale crop of 1914 they reduced 5,300,000 acres; in 1917 they made a reduction of 2,000,000 acres; in 1919 they reduced 4,000,000 acres, and when the price went to 15 cents in 1920 they reduced from 37,000,000 to 26,500,000 acres.

It is therefore foolish to say that there will not be a reduction in acreage, but such reduction is not yet assured and must come from a resentment against low prices.

Under present conditions one man's guess is as good as another's. We think that there is a strong probability but no certainty of lower prices, but we also believe that cotton purchased at present levels will be below the average for the season.

In less than four months the 1926 crop prospects will dominate prices.

Power for the Future

THE Southern Power Company has placed a contract for a 100,000 horse power steam electric plant which will prevent a forced curtailment in the Piedmont section such as has prevailed for the past two months.

It is not probable that another such dry period will occur for many years and the additional 100,000 horse power will take care of the situation during the usual dry spells.

Much has been said and written about the forced curtailment of output and many attribute the present strong situation in cotton goods and yarns to same, but we believe that the actual reduction in pounds of output has been greatly overstated.

It is true that many mills have been on a nominal three-day schedule, but in most cases such mills have pushed their day production harder than usual and have run some at night, and also on Saturday afternoon.

The actual loss of production through the absence of power has been far less than is generally believed.

When the consumption report for October is issued on November 14th, take a look at the consumption by Southern cotton mills and we do not believe you will find much evidence of curtailment.

In our opinion there has been a marked improvement in cotton goods and yarns and it can by no means be correctly attributed to curtailment of output.

Less Lawlessness in Mill Villages

THE foreman of the grand jury at Greenville, S. C., called attention last week to the fact that only two per cent of the indictments before the Greenville County Grand Jury were against people in the Parker District, which includes most of the mills in Greenville.

"If all the people were as law-abiding as those of the Parker Dis-

trict," said Foreman Little, "the duties of the grand jury would be greatly lightened. I have known the mill people for many years and I find pride in the condition which exists today, in the manner in which they are taking advantage of their opportunities to better themselves and in their conscientious discharge of the duties of good citizens."

It is a well deserved tribute that Mr. Little paid to the mill operatives of his town and we believe that the same tribute can be paid to most mill communities.

The mill people of the South are undoubtedly advancing their standard of living and the parents are taking more interest in the welfare of their children.

This is indicated by the steadily decreasing number of children in the mills, between 14 and 16 years of age, during school term, and in many other ways.

There is, however, one blot upon the cotton mill communities that stand out above that in other sections, and that is the number of men who desert their wives and children.

There are hundreds and perhaps thousands of women working in mills to support their children because the husband and father has shirked his obligations and has gone elsewhere to live without sharing his wages with those to whom he owed obligations.

If we were asked to name the two greatest defects of the mill operative of the South we would say first, lack of any inclination to save money, and second, wife desertion.

The second is apparently a growing evil that reflects upon the textile industry of the South.

An Export Inquiry

THE following inquiry comes to us from the Oriental Importing Company, Seattle, Wash., and any mills interested in exporting can obtain additional information by addressing the company there.

The letter from the importers to the Southern Textile Bulletin says:

Will you kindly place before your subscribers, advertisers and clients a request from our Foochow office:

"We have recently developed a good market for Cotton Spool, 200 yards 6 cords in white, black and blue; and 500 yards 3 cord in white, black and blue. This thread is for household purposes and in the machine. The spools must be packed one dozen to a cardboard box. Each assortment of spools must carry a five-letter code word."

Please have the manufacturers submit prices and samples direct to our office at 198 Shang Hong St., Foochow, China, attention of Mr. S. D. Yang. Copies of all letters must be mailed to the Seattle office for file. For any samples of value we shall be more than glad to stand the cost of same.

We have our own trademark registered in China—the Lion-Globe brand—and in case order is placed we require our own brand on the spools.

If this live inquiry is promptly taken care of and the prices are in competition with those furnished by European concerns, we feel sure the results will be above the expectations of the manufacturers.

Personal News

G. V. Pruitt, of Lumberton, N. C., has accepted a position with one of the mills at Mooresville, N. C.

John Shipman, of Spindale, N. C., has accepted a position with the Dover Mills Company, Shelby, N. C.

N. B. West, secretary of the Arcadia Mills, Spartanburg, S. C., has been made assistant treasurer.

W. A. McKoy has resigned as resident engineer at the Republic Mills, Great Falls, S. C.

L. M. Pugh has been promoted to overseer weaving at the Columbus Manufacturing Company, Columbus, Ga.

L. T. Curry has accepted the position of overseer of weaving, slashing and tying-in at the Steele Mill, Rockingham, N. C.

Martin F. O'Neal has resigned as overseer carding at the Sycamore plant of the Avondale Mills, Sycamore, Ala.

H. Arthur Ligon has been elected president of the Arcadia Mills, Spartanburg, S. C., succeeding his father, the late H. A. Ligon.

Richard Gilemer, formerly of Alabama City, Ala., is now overseer of weaving at the Savona Manufacturing Company, Charlotte.

C. C. Brooks has resigned his position at Kosciusko, Miss., and accepted a position with the Delta Land Cotton Mills, West Helena, Ark.

J. M. Little has resigned as night carder at the Aldora Mills, Barnesville, Ga., and accepted a position with the Dixie Mercerizing Company, Chattanooga, Tenn.

T. W. Webster, of Hogansville, Ga., has become assistant overseer of spooling and warping at the Manville-Jenckes Company, High Shoals, N. C.

C. M. Stewart has resigned as overseer carding at the Springfield plant of the Morgan Mills, Laurel Hill, N. C., to become night overseer of No. 1 carding at the Icemorlee Mills, Monroe, N. C.

William Bogart, formerly at the Art Cloth Mills, Lowell, N. C., has been put in charge of the experimental and research work at the Proximity Manufacturing Company, Greensboro, N. C. He is a graduate of the North Carolina State Textile School.

W. P. Ligon has been elected vice-president of the Arcadia Mills, Spartanburg, S. C. He is the younger son of the late H. A. Ligon, who was president of the mill.

Power Curtailment Reduced.

Reduction by one-half day in the curtailment program required of industrial plants in North and South Carolina was announced Monday afternoon by officials of the Southern Power Company, who anticipate an early improvement in the flow of streams as a result of recent general rainfall.

Industrial establishments obtaining electric power from the Southern Power Company will continue curtailing the use of power two days in the week at the request of the power company. The modified program affects all classes of industrial plants, including cotton manufacturing plants numbering more than 300 in the Carolinas which are furnished electric power by the company. The original curtailment program of one day per week became effective in the mid-summer and later was increased to two and a half days per week, placing many industrial plants in this territory on a three-day-a-week basis of operation.

Obituary

Mrs. Francis Patterson.

Mrs. Francis Patterson, wife of Francis Patterson, vice-president of the Roanoke Mills, Roanoke Rapids, N. C., and daughter-in-law of S. F. Patterson, head of the Roanoke and Rosemary Mills, was killed near Weldon last Friday when the automobile in which she was riding was struck by an A. C. L. train. Prior to her marriage, Mrs. Patterson was Miss Catherine Paxton, of Buena Vista, Va. She was 25 years old.

A. L. Bertram.

Lyman, S. C.—A. L. Bertram, 30, master mechanic of the Pacific Mills here, died Monday shortly after noon. Mr. Bertram had been in bad health for about one year. Besides his widow, who, before her marriage, was Miss Derrick, of Columbia, Mr. Bertram is survived by four small sons. The body was taken to Newberry Wednesday morning, where funeral services were conducted at the graveside in Rosemont cemetery.

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W. H. HUTCHINS
V. Pres. and Secy.

MILL NEWS ITEMS OF INTEREST

Newnan, Ga.—The addition to the McIntosh Mills will contain 5,000 spindles and accompanying machinery.

Monroe, Ga.—The Walton Mills have purchased a number of new textile motors from the Allis-Chalmers Manufacturing Company.

Spartanburg, S. C.—The Arkwright Mills are replacing their plain looms with 300 Norday looms made by the Hopedale Manufacturing Company, Hopedale, Mass.

Lavonia, Ga.—The Lavonia Cotton Manufacturing Company has placed contract with the Atlanta office of the Allis-Chalmers Manufacturing Company for new textile motors.

Prattville, Ala.—The Autagua Cotton Mills have purchased 250 Nordray automatic looms from the Hopedale Manufacturing Company to replace plain looms.

LaGrange, Ga.—The Dunson Mills have placed contracts with the Allis-Chalmers Manufacturing Company for a number of textile motors.

Tulsa, Okla.—It is reported that C. R. Miller, of the C. R. Miller Manufacturing Company, of Texas, and head of the Sand Springs Cotton Mills, at Sand Springs, Okla., will establish an overall plant here.

Belmont, N. C.—Lockwood, Greene & Co., engineers of Charlotte, N. C., and Boston, Mass., have been commissioned by Belmont Processing Company, Belmont, N. C., to render complete engineering services on a new office building.

Franklinton, N. C.—The Van-Moore Mills Company has been organized here by A. H. Vann, president of the Sterling Cotton Mills; J. A. Moore, president of the Patterson Mills, Roanoke Rapids, N. C.; George Gilliam and L. H. Allison, of Franklinton. Plans of the new company have not yet been announced. The company is capitalized at \$300,000.

Spartanburg, S. C.—H. Arthur Ligon, son of the late Dr. H. A. Ligon, was elevated to the presidency of Arcadia Mills in Spartanburg county at a meeting of the directors succeeding his father. W. P. Ligon, second son of the late mill president, was elected vice-president.

Dividends of 5 per cent on \$200,000 common stock and 3 per cent on \$800,000 preferred stock were declared. The new president of the mill has served as treasurer since 1923 and is at present treasurer of Mills Mill, which operates plants at Greenville and Woodruff. The late Mr. Ligon was president of Mills Mill, at Greenville, no successor having been chosen since his death.

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Employers' Liability Insurance, Automobile Insurance, Public Liability Insurance
Cash refunds to policyholders, amounting to nearly \$13,000,000 since organization, have realized savings to them of at least 20% of the standard stock company insurance cost.

Bankrupt Sale

Cotton Yarn Mill

Under order of the United States District Court, Northern District of Georgia, I, as Trustee in Bankruptcy of Calhoun Yarn Mills, Calhoun, Georgia, will offer at public sale before the Court House door in Calhoun, Georgia, at about ten o'clock A. M., on November 19th, 1925, all the property and assets of said mills, consisting of main plant, warehouses, fifteen tenant houses, together with real estate and other property of said mills, said mills equipped with 2040 spinning spindles and other necessary equipment to run 12's to 14's single and plied yarns. Power, electric. For further information, see or write the undersigned.

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Sewer and Water Development

Largest Landscape Organization in the South

East Point, Ga.—The Lullwater Manufacturing Company will double the capacity of its garment department, having already placed contracts with the Singer Sewing Machine Company for additional equipment. The plant manufactures men's work shirts, women's aprons and other lines. Fabrics for the garments are made at the East Point and Thomson plants.

Spartanburg, S. C.—Arkwright Mill, of this city, has been awarded a contract to furnish one million yards of cloth for the Ford Motor Company, Detroit. Deliveries are to begin immediately. This is the first Spartanburg mill to secure a Ford contract. The cloth will be put through a rubberizing process and eventually will be used for automobile tops material. Announcement of contract was issued by R. Z. Cates, Jr., assistant treasurer of Arkwright Mill. Several Northern mills competed for the contract.

Belmont, N. C.—The Belmont Processing Company, the new mercerizing plant, will begin operations March 1, 1926. The completion of this mill will fill a long needed gap in Belmont's chain of manufacturing plants. It will insure a steady and reliable market for local yarns, which, after being treated to the mercerizing process, will also command a wider and more popular sale. Stockholders in the local mills are highly pleased at the arrangement, prophesying extra profits and greatly enhanced values when the chain is complete. J. M. Hatch is secretary and general manager.

Belmont, N. C.—Chronicle Mills, the oldest of Belmont's textile manufacturing plants, is to be enlarged, according to announcement by A. C. Lineberger, president, and R. L. Stowe, secretary and treasurer. The addition will necessitate an outlay of \$200,000. An extra building, 80x100 feet and two stories high, will be erected immediately. The mill at present has 10,000 spindles, together with 31 more cards and 24 combers.

The product of the mill will be largely changed from carded to combed yarns and will consist principally of 24s to 30s. The change to this yarn is brought about by the fact that none of the other Belmont mills are making this count of yarn, and this size is needed to complete the full quota and assortment needed to keep the mercerizing plant going. Every other count in fine yarn up to 120 is manufactured in some one of the fine yarn mills at Belmont.

Spartanburg, S. C.—Contracts totalling about \$40,000 were let by Lockwood, Greene & Co. for installing electric group drives in the Glendale Mills. There remain contracts amounting to possibly \$20,000 to be let before the entire amount.

of work is cared for, according to H. W. Reding, who is in the city attending to the work for the construction company.

The contract for motors and generators was let to the Westinghouse Electric Company. Contracts for wiring the mill was let to Huntington & Guerry Electric Co., of this city. The contract for necessary belting and chains was let to the Link-Belt Company.

Work on the electrification of the mill will begin in about thirty days, Mr. Reding said. No definite time has been set for beginning the work, but construction is expected to start as soon as equipment reaches the city.

The plans for the new mill call for a water wheel and generator capable of generating 900 horse power needed for operation of the mill will be purchased from power companies having line within the city.

The mill will be operated by what is known as the small group drive system. Motors will be placed about the mill connecting with several machines to enable one motor to drive several machines, but still not have all machines connecting with the same drive and the connecting belts and chains running through the building.

Mill Claims Water Rights

Hickory, N. C.—A threatening suit against the city of Hickory was brought to the attention of city council by A. A. Whitener, attorney for the Brookford Mills, who cautioned the city against taking water from the river which supplies power for the mill and in which the mill claims all water rights. The mill alleges that the city takes 300,000 gallons of water from the river daily and that the amount is sufficient to cripple the power to operate the plant at Brookford.

The movement of the mill owners gained force when it was announced that the City of Hickory would sell water to West Hickory. The mill will allege that Hickory has no right to sell this water to other municipalities when the disposal of it will curtail the power for which it claims the water rights. The matter was presented more or less informally by Mr. Whitener and no action has been taken, but it was understood that unless the City of Hickory reaches some agreement with the Brookford Mill, regarding the water, there will be a legal fight.

Greenville Textile Club Meets

Greenville, S. C. — Executives of Greenville cotton mills were honor guests on Friday evening of last week at the October supper of the Greenville Textile Club, composed

Wanted

Two good loom fixers on E & P Model Draper looms, making light Duck and Osnaburgs. Good pay and healthy place to live. Must be strictly sober and real loom fixers. Apply to D. D. Golden, Overseer of Weaving, Monticello, Ark.

DRUIDOAK LOOM LEATHERS

Highest Grade Oak Tanned
For Cotton, Wool and Silk Looms

Check Straps,
Dobby Straps,
Lugs, etc.

Hold-ups,
Bumpers,
Jack Straps

The Druid Oak Belting Co., Inc.

Baltimore—Boston

EMMONS LOOM HARNESS COMPANY

The Largest Manufacturers of Loom Harness and Reeds in America

Loom Harness and Reeds

Slasher and Striking Combs, Warps and Leice Reeds,
Beamer and Dresser Hecks, Mending Eyes, Jacquard
Heddles

LAWRENCE, MASS.



That's just the way you'll feel when Westinghouse has finished servicing your motors and other electrical apparatus. No more worry—no more trouble—just plain ordinary satisfaction in knowing that the job was done right and by someone who knows his business.

That's what they call the satisfaction of certainty—certainty in knowing that when you call upon Westinghouse to service your electrical equipment you won't need to wonder whether the job will be done right—you know it will.

We are proud of the fact that our Service Shops at Charlotte and Atlanta are always busy with the work of customers who want to feel the satisfaction of certainty. Are you one of them?

Westinghouse Service

WESTINGHOUSE ELECTRIC & MANUFACTURING CO.

210 E. Sixth St. Charlotte, N. C. 426 Marietta St., Atlanta, Ga.

Reliable Humidifying Devices Since 1888

also

Better Textile Dryers

Manufactured by GRINNELL COMPANY, Inc.

AMERICAN MOISTENING COMPANY

Atlanta
Georgia

Boston
Massachusetts

Charlotte
North Carolina

of mill overseers with superintendents as honorary members, and the occasion was an interesting and delightful one.

D. W. League, of Poe, the club president, extended a welcome to the guests on behalf of the organization.

The purposes of the Textile Club were explained in a very interesting talk by Harry W. Moseley, local man.

The honor guests were then presented, the following executives responding:

Aug. W. Smith, president, Brandon and Poinsett Mills; C. E. Hatch, general manager, Brandon and Poinsett Mills; W. B. Perrin, assistant general manager, Brandon and Poinsett Mills; R. E. Smith, treasurer, Camperdown Mills; R. D. Emory, general manager, Dunecan Mills; Davis Cardwell, treasurer, Dunecan Mills; C. N. Wallace, Dunecan Mills; B. S. Mills, secretary, Judson Mills; L. A. Wertz, general manager, Mills Mill; T. M. Marchant, president, Victor-Monaghan Company; A. H. Cottingham, general manager, Victor-Monaghan Company; Herbert Lindsay, treasurer, Victor-Monaghan Company; B. O. Woodward, secretary, Victor-Monaghan Company; W. E. Beattie, former president, Victor-Monaghan Company; F. W. Poe, president, F. W. Poe Manufacturing Company; John W. Arrington, Jr., vice-president, Union Bleachery; John T. Woodside, president, Woodside Mills; E. F. Woodside, treasurer, Woodside Mills; George Brownlee, secretary, Woodside Mills; F. M. Burnett, J. A. Piper and J. A. Morgan, of the Boy Scout Commission of Greenville county, and M. G. Boswell, scout executive; Jesse D. Brown, now of the Monaghan Y. M. C. A.

Miss Mary Langston, the Monaghan girl who won \$350 in prizes for a dress she made in the Made-in-Carolinas Exposition fashion show, in Charlotte, was introduced by Mr. Hollis.

Mossberg Opens Greenville Office

The Mossberg Pressed Steel Corporation, of Attleboro, Mass., has opened an office in Greenville, S. C., at 101 Augusta street. The company will be represented by R. E. Johnson and Mr. Osteen, who will be in charge of this office. Both men have had wide experience in textile manufacture, particularly with reference to the use of pressed steel devices of the sort manufactured by the Mossberg Pressed Steel Corporation, including beam heads, beams, spools, reels, braider carriers, drop wires, etc.

Mr. Johnson and Mr. Osteen will call on the trade in the Southern territory, particularly in North and South Carolina and Georgia.

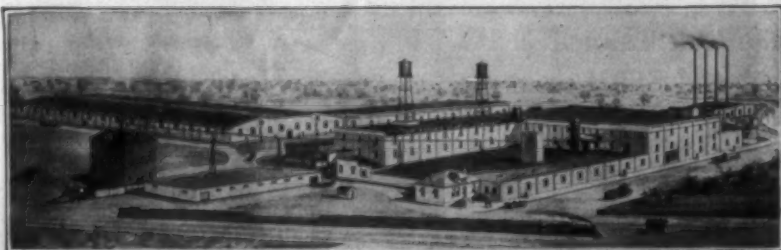
Joseph L. Davidson Co.

Established 1889

Designing Card Stamping Repeating
FOR ALL TEXTILE FABRICS

2525 N. Second St., Philadelphia, Pa.

VICTOR MILL STARCH – The Weaver's Friend



It boils thin, penetrates the warps and carries the weight into cloth. It means good running work, satisfied help and one hundred per cent production.

We are in a position now to offer prompt shipments.

THE KEEVER STARCH COMPANY

COLUMBUS, OHIO

DANIEL H. WALLACE, Southern Agent, Greenville, S. C.

C. B. ILLER, Greenville, S. C.

L. J. CASTILE, Charlotte, N. C.

INSPECTING
SEWING
BRUSHING
SHEARING
SINGEING
PACKAGING
FOLDING

Curtis & Marble Machine Co.

Textile Machinery
Cloth Room and Packaging Machinery
WORCESTER, MASS.
SOUTHERN OFFICE
1000 Woodside Bldg. Greenville, S. C.

DOUBLING
MEASURING
WINDING
STAMPING
TRADEMARKING
CALENDER
ROLLING

RUGGED CONSTRUCTION

SERVICEABLE

"COLUMBUS TAPE"

GEORGIA WEBBING & TAPE CO.

COLUMBUS, GA.

Established 1896

Incorporated 1914

LOWELL SHUTTLE COMPANY

Manufacturers of

BOBBINS SPOOLS SHUTTLES

Write or Telegraph for Quotations

Office and Factory: 19 Tanner St., LOWELL, MASS

"HIGH GRADE"
BOBBINS
SPOOLS
SHUTTLES
SKEWERS
ROLLS, ETC.
OF EVERY DESCRIPTION

THE DAVID BROWN COMPANY

Lawrence, Mass.

Correspondence Solicited

Catalog on Request

AUTOMATIC SHUTTLES
Try Our New Automatic Shuttles for either cotton or woolen weaving. It is meeting every requirement with entire satisfaction.

Need and Value of Safety

(Continued from Page 14)

is fairly dealt with after an injury, and that his family is adequately provided for. This, of course, will cause a sharp rise in our accident charges. The only way we can minimize this increased expenditure of company money is by the vigorous application of safety.

Our compensation payments have been decreased very decidedly, in spite of the fact that in July, 1923, an act of the State Legislature raised our compensation rate from \$12 to \$17 per week.

	1921	1922	1923	1924	1925
Compensation Paid					
Injured Employees	\$8,012.40	\$7,149.77	\$5,426.18	\$2,278.92	\$264.99

These compensation charges are figured against the month in which the accident actually occurred, although the payments may continue for many months or even years later.

12,000 spindle equipment at the Cascade.

It was not that he was dissatisfied with the 88,000 spindle job, but he wanted experience on rayon and silk mixtures, and the Cascade Mills are making such goods.

Frank Bruton, the president of the Cascade Mills, was formerly superintendent of the Dacotah Mills at Lexington, N. C., and made a big success there. After spending a short time with Mr. Bruton and promising to go to the Rotary Club dinner with him, Will Gibson took me through the mill.

The Cascade Mills was formerly a yarn mill. It was purchased by Mr. Bruton and 300 Stafford looms

	1921	1922	1923	1924	First 8 Mos. 1925

The actual number of hours lost from work by our injured employees has been remarkably reduced:

Seeing Georgia Mills

(Continued from Page 19)

that had recently been installed.

All the slashers in their very large slasher room have been connected with a Nivling circulating system and Foxboro regulating and recording instruments. Geo. Murphy had put considerable study upon the slashing problem and had installed the system that he thought would give the best results.

About six o'clock he sent us back to the hotel in his car.

Visiting North Carolina Mills.

Being invited to address the Rotary Club of Mooresville, N. C., on the Thursday night after I returned from Columbus, I left ahead of time and on reaching Mooresville drove out to the Cascade Mills.

I soon found my friend, W. H. Gibson, Jr., vice-president of the Southern Textile Association, who recently left an 88,000 spindle job at Union, S. C., to take charge of a

added, about half of which were equipped with 24 harness dobbies.

It manufactures cotton, silk and rayon mixtures, using carded cotton yarns.

I had not been in this mill since it was changed to a weaving mill and I was very much surprised to find it in such fine physical condition and being operated so efficiently.

I was told by others that there had been a wonderful improvement since Will Gibson took charge and it is certainly a fact that it could not have been operating much better.

It was one of the cleanest mills I ever visited and the 20 harness, three beam cotton and rayon warps were running like plain goods.

I asked Frank Bruton if he thought he could make a fancy weaver out of Gibson and he said that it looked to him like he was already one.

I predict that the Cascade Mill is going to make a wonderful record under its present president and superintendent.

**PERKINS
Practical
Brush**



SWEEPING CLEAN—

is no longer a problem for textile mills.

They have found that floors can be kept much cleaner and great savings can be made in the cost of labor and materials by using our No. 142 and No. 241 floor sweeps. Because of the size and shape of these brushes, they are able to do three times the work of a broom, and will outlast four brooms*.

Textile mills the country over are replacing inferior scrubbing brushes with Perkins Practical Floor Scrubs. Our No. 48 floor scrub is ideal for mill usage because it reaches every nook and corner of the building.

Our absolute guarantee of perfection in workmanship and satisfactory service stands behind every sweep and scrub we make. Write for prices.

*These figures are taken from an actual experiment. Name of mill will be supplied upon request.

ATLANTA BRUSH CO.
ATLANTA, GA.

THE SUPERIOR PORCELAIN

for

Textile Machinery

manufactured by

Page-Madden Co.

Incorporated

128-34 Sumpter St.
Brooklyn, N. Y.

Samples and Catalog upon Request



No. 654



No. 344



No. E-4

**Guaranteed
Textile
Brushes**



Hands Up!



You are robbing yourself of real money if your travelers are not of the highest quality. Victors are made by a concern that specializes in ring travelers. As to their quality—send us a postcard for samples, stating sizes, and see for yourself. They're FREE. Write today.

VICTOR RING TRAVELER COMPANY

20 Mathewson St.

Southern Agent
A. B. CARTER

Providence, R. I.

615 Third National Bank Bldg.
Gastonia, N. C.

Lack of Lubrication

FIRST!

in causes of machinery failure

IN 1924, the McGraw Hill Company, publishers, sent out a questionnaire to 2500 manufacturers throughout the United States, seeking facts on the causes of failure of machinery. Replies from 516 were received; 274 graded points in their order of importance.

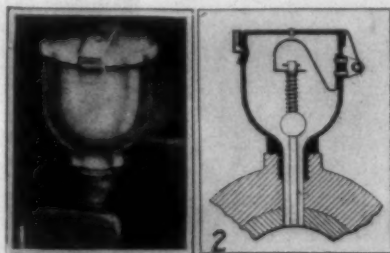
"Lack of Lubrication" was mentioned the most number of times. Eighty companies stated that this was the *biggest* cause of the failure of machinery. "Faulty Design," which ranks next, received but forty-seven votes.

"Improper Adjustment of Bearings" was mentioned by eighty-two concerns as the second most important cause of machinery failure. Even in this grading, "Lack of Lubrication" came next with sixty-two votes.

Instead of grading replies, thirty-six companies gave percentages to indicate causes of machinery failure. The chief cause again was shown to be "Lack of Lubrication."

Knorr Lubricators Remove This Cause

by automatically, properly and positively applying the minimum amount of lubricant. Hidden oil holes hard to reach, lack of time, forgetfulness—all the factors responsible for improper lubrication instantly vanish with the installation of Knorr Lubricators.



The whole secret of the success of the Knorr Lubricator lies in the combination of the spring on the feed-pin and the agitator (shown in the above cross section). When installed the feed-pin rests on the shaft, the rotary motion of the shaft causing, through vibration, a pumping effect, which by means of the agitator, forces the lubrication down to the shaft. The action of the Knorr is entirely mechanical—heat is most decidedly not a factor.

Write for Sample Knorr Lubricator and Our Pamphlet Containing Valuable Information

Malcolm H. Smith Co.

Incorporated

50 Congress St.

Boston, Mass.

Cotton Mill Processes and Calculations

(Continued from Page 21)

		Slub. and Inter.	Roving and Jack
N	Fender Gear	68 T.	68 T.
N ¹	Fender Shaft Gear	44 T.	30 T.
O	Fender Intermediate Gear	56 T.	56 T.
P	Differential Motion Intermediate Gear	44 T.	36 T.
Q	Differential Spur Gear	34 T.	34 T.
Q ¹	Differential Bevel Gear	48 T.	48 T.
R	Jack Large Bevel Gear	30 T.	30 T.
R ¹	Jack Small Bevel Gear	16 T.	16 T.
S	Bell Gear Bevel Gear	48 T.	48 T.
S ¹	Bell Gear	50 T.	50 T.
T	Swing Gear	37 T.	42 T.
U	Back Bobbin Shaft Gear	42 T.	37 T.
U ¹	Back Bobbin Shaft Skew Bevel Gear	55 T.	55 T.
V	Front Bobbin Shaft Gear	42 T.	37 T.
V ¹	Bobbin Bevel Gear	30 T.	22 T.
V ²	Bobbin		
W	Swivel Bracket Gear	31 T.	31 T.
W ¹	Lay Change Gear, 12 to 30 T.		
X	Gear on Stud Bevel Gear	44 T.	44 T.
X ¹	Bevel Gear driving Horizontal Bevel Gear	22 T.	22 and 15 T.
Y	Horizontal Bevel Gear	22 T.	22 and 30 T.
Y ¹	Bevel Gear, driving Reversing Bevel Gear, 12 to 20 T.	45 T.	15 and 13 T.
Z	Reversing Bevel Gear, short hub	70 T.	70 T.
Z ¹	Reversing Bevel Gear, long hub	70 T.	70 T.
Z ²	Reversing Shaft Change Gear, 14 to 22 T.		
Z ³	Gear, driven by Reversing Shaft Change Gear	68 T.	96, 80 & 68 T.
Z ⁴	Lifting Shaft Driving Gear	13 T.	13 T.
Z ⁵	Lifting Shaft Gear	57 T.	73 T.

Other Differential Motions.

133. The differential train that has been discussed is known as the "Holdsworth." It is used in this country on the Saco-Lowell and the Whitin fly frames. In this motion some of the gears must revolve loosely on the driving shaft in a direction opposite to that of the shaft. This is objectionable on account of friction. To reduce this friction, a number of differentials have been designed, all of whose wheels run in the same direction as the main shaft. Two of the most important designs will be discussed.

Tweedales Differential.

134. The Tweedales differential, shown in Fig. 32 can be found on a Howard & Bullough or on a Tweedale & Smalley frame. In this the differential consists of four gears of unequal number of teeth. Attached to the main shaft, and therefore revolving with it, is a small arm that carries two gears which are free to revolve upon their axes. The smaller one gears with the sleeve, upon which is the bobbin driver. The larger one gears with a pinion fixed upon a hollow shaft that is driven from the cones.

Let:

c=pinion on hollow shaft.

d=large gear on arm.

e=small gear on arm.

f=gear on sleeve.

sleeve.

Now, one turn of hollow shaft will cause $\frac{c \times e}{d \times f}$ turns of the
This is the value of a differential train of gears, and we will
call it r .

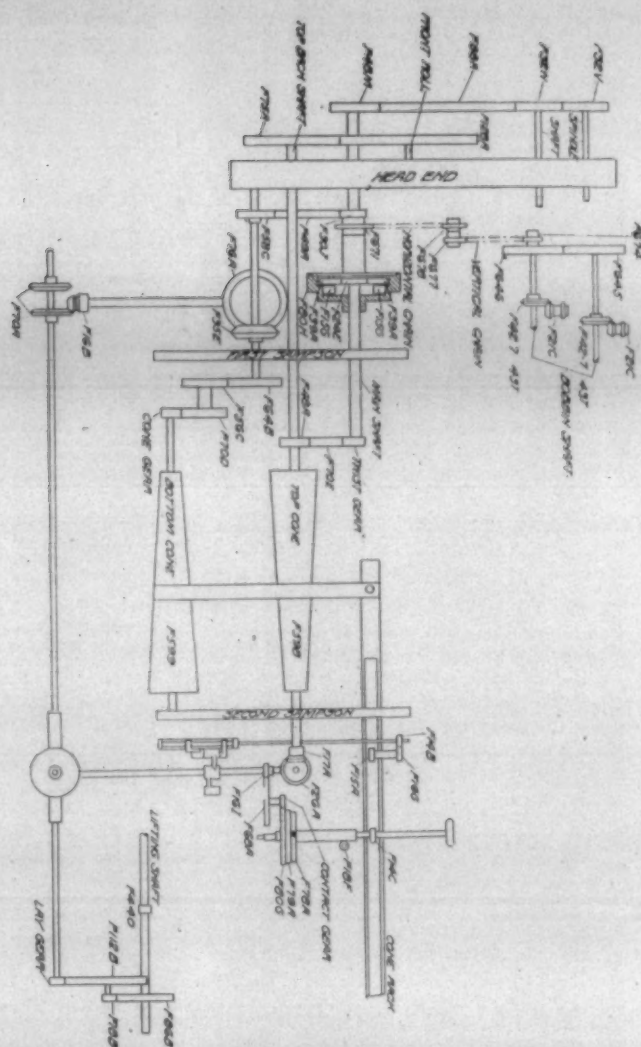


Fig. 31
8x3 $\frac{1}{2}$ ROVING FRAME
With 7" Gearing
With Daly Compound and Chain Drive, Showing Gearing and
Connections

Let:

n=rev. of main shaft
b=rev. of sleeve.
s=rev. of hollow shaft.

(Continued next Week)



Seydel-Woolley Co.

Textile Chemicals for Best Weaving

Seyco Products

The result of twenty years' study and practice in treatment of Sizing and finishing problems.

Main Office and Plant, 35 Glenn St., Atlanta, Ga.



NOPCOV

For Better Finishing

NOPCOV is used to great advantage in the finishing of piece goods, in place of ordinary sulphonated oils, turkey red oils, etc. Not over half the quantity of NOPCOV should be used as would be required of a 75 per cent turkey red oil.

The use of NOPCOV in finishing results in a very much finer, softer feel to the goods, better lustre, **entire absence of odor**, and a freedom from any tackiness such as is often encountered with turkey red oils or other oils made from castor oil base which are always, by nature, more or less sticky.

On account of the small quantities of NOPCOV required to produce definite effects and the superior results produced, this oil falls into a class by itself from both a quality and price standpoint.

National Oil Products Co.

Main Office:

HARRISON, N. J.

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BOSTON



Another PAGE-fenced SOUTHERN MILL—

The Hannah Pickett Mills, Rockingham, N. C., chose Page Fence, specifying wire of ARMC0 Ingot Iron (exclusive with PAGE). This rust-resistant wire-link, covered with the super-heavy galvanized coat, is the last word in durable protection.

Style 5-TR PAGE Fence, high overall was used—five barbed wire strands extending over

either side of the fence making it practically unclimbable.

Why not have this lasting protection for your plant? We carry a complete stock of PAGE Fencing,—will erect your fence promptly, or furnish a foreman to direct your own workmen. Plans and estimates without obligation. Just phone; wire or write the address below.

GENERAL EQUIPMENT COMPANY
Charlotte, N. C.

**PAGE PROTECTION
FENCE**



Attractive Winter Excursion Rates

VIA

Norfolk-Southern Railroad

To destinations in North Carolina, South Carolina,
Georgia, Florida and Alabama

Attractive schedules to
Pinehurst, N. C., New Bern, Beaufort and
Morehead City, N. C.

Ideal locations and ample facilities for conventions
at either point.

For tickets or information, apply to any ticket
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DIXON LUBRICATING SADDLE CO.

BRISTOL, RHODE ISLAND



Use Dixon Patent Stirrup Adjusting Saddles, the latest invention in Saddles for Top Rolls of Spinning Machines. Manufacturers of all kinds of Saddles, Stirrups and Levers.

WRITE FOR SAMPLES

Like any other product of standard and permanent value to the textile industry the success of the special purpose

WYANDOTTE TEXTILE ALKALIES

could only result from a knowledge of how to prepare materials to scientifically meet the problems of the textile plant.

Ask your supply man



The J. B. FORD CO., Sole Mfrs.
Wyandotte, Michigan

SALT
SPECIAL GRADE
FOR TEXTILE MILLS
FREE OF INSOLUBLES—
MYLES SALT CO. LTD.
NEW ORLEANS, USA.

SPINNING RINGS
TWISTER RINGS
SILK RINGS
DIAMOND FINISH

TRAVELER CLEANERS
TRAVELER CUPS
GUIDE WIRE SETS
**WHITINSVILLE
SPINNING RING CO.**
WHITINSVILLE, MASS.
SPINNING RING SPECIALISTS
FOR MORE THAN FIFTY YEARS

International Trade Problems

COL. F. VERNON WILLEY, in an address before the National Association of Cotton Manufacturers, said:

Cotton as an article of world commerce comes into more intimate contact with the life of the world's inhabitants than any other single article, once food requirements have been supplied. A very small increase in the per capita consumption of cotton cloth can make so big an effect upon the fortunes of those associated with its production, manufacture and distribution, so it is that a gathering so important as that which I have the honor of addressing tonight, representative of every phase of the cotton industry from every part of the United States, is an appropriate setting for the review of certain world conditions. The great war released suppressed aspirations in many countries until then relatively less prosperous than the United States. Feelings of Nationalism were intensified. The cravings for changed conditions, governmental, social and economic, aimed at a higher material prosperity. So it is that in our time, so small a span in the world's history, the years already taken by the world as a whole outside the United States in settling down after the disturbance of its equilibrium, should not cause despondency. Against the disaster to human life, there is on the credit side, the quickening scientific invention, the radio, medical and surgical progress, and the synthetic production of substitutes like nitrogen, the increase of meat-eating and wool-wearing habits hitherto hardly known to the war levies of many of the belligerent nations, improvement of transportation, all have added to the world's advancement. But the buoyancy of commercial adventure in 1919 was apparently based on a false financial foundation. The world financially and commercially has not yet recovered from its disorganization and discouragement.

The increase of Nationalism has intensified the tariff barriers, all helping to hamper world trade. Incidentally one wonders to what extent the comparative prosperity of the United States is due to so large a free trade area, which this community of commonwealths has developed. Its success, anyhow, is a natural cause for criticism from your citizens not familiar with Europe, who would advise emulation, unheeded of prejudices, traditional jealousies, languages, and religions.

World Trade.

The world lives by trade. Trade flourishes in the sunshine of peace. At no time was there greater need for collaboration between the United States and England. Today the world is suffering from the shrinkage of world trade. The overseas trade of the world in volume is only 78 per cent of its pre-war volume. Great Britain, the leading industrial country, suffers more than any other, but she has actually slightly increased her proportion of what there is going. But as a great ex-

(Continued on Page 34)

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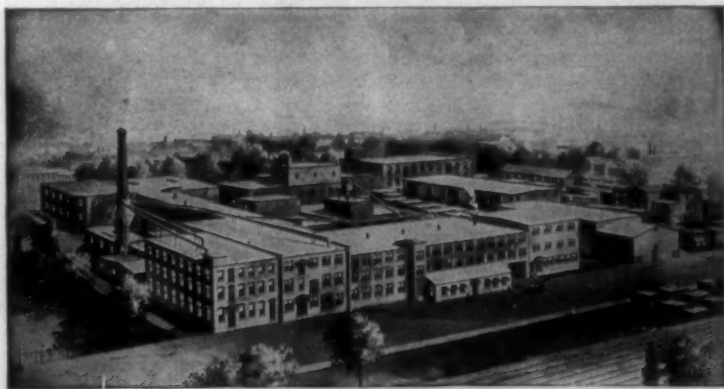
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The French Textile Industry

(Continued from Page 7)

mule-spun yarns are a very distinct advantage to the foreign manufacturer; it is not adapted to the mass production of American methods and it is to be regretted that mule spinning has been made so very difficult by the operatives in America that we can not go in for it in more of our work. There is very little mule spinning in America, because, I am informed, of the autocratic methods of the employees' unions. Mule spinning is done by men and the so-equipped mills are not only expensive to operate but expensive to build and equip.

8. In conclusion, I may say that while my trip to France was very delightful and while my opportunities for inspecting plants were sufficient for obtaining a bird's eye view, I do not anticipate that we are at all likely to expand this first visit of industrial delegates to the extent of its becoming a custom; the success of the trip is largely in just what would be expected of an arrangement under the auspices of the Franco-American Good Will Society. Such intercourse unquestionably promotes good feeling and friendly relationships; but, definite business results are hardly to be expected. As a matter of fact, the original idea was to have youths of the different countries exchanged who were not yet established in business—the system worked out by the Roubaix-Turcoing Syndicate which has been working for some time has generally resulted in commercial relations rather than technical, many cases having already occurred of the delegates becoming foreign representatives, connected with the merchandising end of the Roubaix-Turcoing industries.

When I accepted the appointment as delegate from America, I rather anticipated this situation, and made only the single condition that I did not think it worth while for the American Cotton Manufacturers' Association to spend money for such a trip and that if I went it must be at my own expense; this proved to be the case, and while I frankly had a delightful trip which was individually worth while, I must freely admit, except for the few general impressions noted above my inability to report anything more definite than that despite the friction that would naturally be expected to exist on account of the debt situation, and the natural resentment that would be expected toward foreign imitators, the French cotton manufacturers and business men generally have only the warmest regard for their American competitors, and certainly seem disposed to go quite as far, and probably further, as I have said before, in affording opportunities for looking around, than would Americans do under like circumstances. I will add, however, that were I a Frenchman, I should be less inclined to show Americans through my plant, than as an American I should show a Frenchman through it; because, the Frenchman is not now and never likely to become a competitor of America, on

mass production, nor we are likely to go in for the kind of fabrics that the French specialize upon. In other words, they can only lose by our copying their designs, altered from mass production; and we are totally unable to duplicate the kinds of products in which labor cuts so large a figure.

More Automatic Cotton Manufacturing Needed

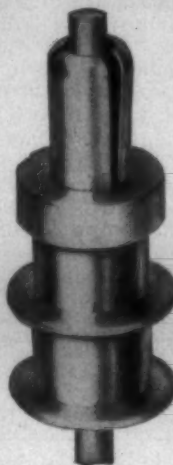
(Continued from Page 12)

but there they are and come and go to be kicked around, trampled upon, and run over all to be more or less injured and broken. The bad work caused by damaged bobbins that are indented, slivered, etc., is a serious matter in any mill.

Now, a well arranged empty bobbins conveyor system would deal gently with the bobbins. There would be no more empty bobbins on the floor. There would be no more ugly looking top creels covered with empty bobbins crisscrossed and which is always a repulsive sight.

Again might be added something about the great damage done by falling bobbins which cause so many broken ends, broken gears, broken bobbins, ring rails put out of fix, "broken necks" of people falling over them on the floor, broken flyers, loss of production, injured work, besides the extra work and the increased cost. All of the above is the result of empty bobbins falling off of the top creels, and on account of others being dropped by the spinners when putting them on the top creels. All of this would be done away by having a V-shaped open mouth receiving trough on the edge of the creel into which the empty bobbin would be more surely entrapped, but which would be silently and gently carried off. If there is any cleaning to be done to the bobbins such as roving to be cut off from same the spinner's time is too valuable for this kind of work. A spinner is paid for skill and not for cheap work. Besides the bobbins should be cleaned automatically by machines. This in itself would save thousands of bobbins annually to any mill. All of this that we are considering is so serious that besides the damages caused by the empty bobbins, mills are purchasing on an average of 3,000 to 10,000 new spinning bobbins per month to replace those bobbins which are damaged and broken. Where 10,000 bobbins per month are ordered at an average cost of three to four cents apiece, we have a standing account to pay of \$300 to \$400 per month. Moreover, the above item does not include the cost of new roving bobbins, new spools, etc., and which will average proportionately as great. Also the extra cost of the damages involved as related thereto. The remedy is to look into the possibilities and the advantages of a more automatic service in our mills. The cost of these things should be matched up with the savings involved as a whole. This is as important as it is to watch the cotton prices or the selling prices. Prevention of losses is a great game in our mills. The old slogan that an ounce of prevention is worth more

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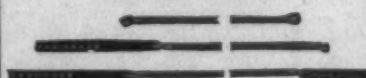
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than a pound of cure can well be applied yet here and there in our mills. The under current of losses is not so visible as the surface losses. We must not let such conditions deceive us. While the Jew said he could make more money selling goods "below cost" because he sold in such large volume the undercurrent brought him an inflow of profit. We must measure the undercurrent to see what kind it is, whether it is an inflow of profit or an undertow of losses.

Southern Spinners' Bulletin

The weekly bulletin of the Southern Yarn Spinners' Association says:

The yarn market is quiet. Spinners' prices remain firm in spite of the unexpected Government figures of October 20. Buyers are holding off anticipating lower prices as the result of the crop figures. Some spinners are reported to be booking business for next year's delivery at a slight concession on today's prices.

The curtailment practiced during the early summer, and the later enforced curtailment due to water shortage has enabled the spinner to maintain a market in spite of adverse reports. Prices today show approximately the same manufacturing margin existing between cotton plus waste, and yarn prices, less commission, discount and freight as existed a year ago, as shown by the following figures: October 25, 1924, cotton 22.95, plus waste equals 27 cents.

Philadelphia.

20-2 Warps... 43½ Mfg. margin 12.18
30-1 Hos. 46 Mfg. margin 17.18
12-1 Skns. 41 Mfg. margin 9.88
October 26, 1925, cotton 70.75 plus waste equals 24.41.

Boston

20-2 Warps... 43.00 Mfg. margin 14.21
30-1 Hos. 43.00 Mfg. margin 16.11
12-1 Skns. 38.50 Mfg. margin 10.17

Philadelphia.

20-2 Warps... 41.00 Mfg. margin 12.47
30-1 Hos. 44.00 Mfg. margin 16.95
12-1 Skns. 37.50 Mfg. margin 9.24

In spite of the fact that a larger manufacturing margin exists now than for several months past, today's prices barely represent replacement values based on prevailing New York spots quotations.

Unquestionably, curtailment is necessary if the spinners expect to make a profit on their operations. With the large Government estimate, and the probability of lower prices, the buyers are hesitant to make commitments, and unless that is difficulty in securing their requirements, unquestionably the market will be forced to lower levels.

Cotton Cloth Exports From Japan.

Exports of cotton cloth from Japan during the first eight months of 1925 amounted to 606,041,141 yards valued at \$184,766,847 yen, according to the ten-day reports of the Japan Cotton Merchants' Union and the Cotton Yarn and Cloth Exporters' Union, advices to the Textile Division of the Department of Commerce state.

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"AKRON" Belting means less cost per spindle per year than other belts.

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International Trade Problems

(Continued from Page 31)

porting country she naturally suffers most from the handicap of depreciated exchanges. We had all hoped that France, recognizing the advantage of world respect for a moral discharge of her obligations would in the negotiations which have just taken place have removed the stigma that she is evading her obligations. Such an action on the part of a country of the prestige and wealth of France is an unfortunate example to the commercial morality of the world. Those who know France intimately will have observed on all sides her prosperity, high employment, and great industrial expansion. Those who have not, can appreciate it equally well by the figures which show a so substantial favorable trade balance of the peace. That we in Great Britain remember France still keeps some 700,000 soldiers with the colors, and that she does not hesitate at a generous policy of loans to other European countries for military armament.

That in borrowing abroad in 1919, she has now, by depreciating her currency and so robbing her creditors, virtually repudiated 75 per cent.

That militarism invites a disturbance of the peace. That we in Great Britain, dependent on world trade, can only prosper by peace, you will understand that we hope that the United States will exercise its influence to secure an early settlement of the debts, question a balancing of budgets and a prompt conversion of her currency.

Conditions in England.

You will, perhaps, permit me to turn for a few moments to conditions in England. I have, while in this country, had it frequently pointed out to me that the black picture painted of conditions in England would make us appear to have less confidence in ourselves than those familiar with us in this country have. Anyhow, such reports do us no good. We ought to be boosters and not knockers. Again, the suggestions of a high production cost turns possible customers away, and so our foreign trade is hurt. The actual conditions are in some aspects, unsatisfactory, but we are not by any means in despair. Our

financial condition is sound, "our currency" is at parity, we have since the close of the war, paid off 2½ billion dollars of debt. We have more people engaged in industry today than before the war. Our savings and bank deposits are increasing. We have our industrially skilled labor, plants more efficient than before the war and our spirit is undaunted. True, we have 1,300,000 people out of work. The burden of this is great. Our taxations amount to 23 per cent of our national income. The unpaid portion of our advances to allies while increasing our taxation for the interest service on the loans, increases our manufacturing overheads, and simultaneously acts as a subsidy for trade in the debtor countries. We have remitted France two-thirds of our debt which means that we have subsidized French industry to the extent of \$120,000,000 a year. The unemployment benefit, is worked on a contributory scale, and the fund subject to obligation to pay the benefits. It is not an ex-gratia payment by the State to those who do not work, as it is too often believed. Other countries outside Great Britain recognized that after the war it was not possible to permit the industrial population to starve in periods of depression. In addition, the large disbursements by the State on social services. Health insurance, unemployed pay, old age pensions produce a prosperity in our sheltered trades—building transportation, catering entertainment, etc., which by retarding deflation intensifies the handicap of our export trades. Their agony is already sufficient by reason of the rise in the value of the pound. If one examines the chart of industrial activity in Great Britain over the past 70 years, it will be seen that the periods of greatest prosperity have coincided with periods of greatest foreign investment and emigration. Before the war we invested on an average \$1,000,000,000 annually. Today, our resources do not permit this. The available surplus of the trade balance last year was only \$150,000,000. When we invested abroad we, of course, loaned the capital in merchandise which produced a demand for our manufactured products.

Today this insufficiency of resources removes that demand,

Meeting the Demand

Much is demanded from dye-house equipment. The destructive action of live steam, acids and alkalis must be successfully withstood or efficiency and profits disappear like mist before the sun.

For ten, twenty, thirty and more years Klauder-Weldon machines have functioned efficiently and produced profits under the most exacting conditions.

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KLAUDER-WELDON DYEING MACHINE CO.
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wherefore it is not unnatural that we should have had trade. Simultaneously, in the years before the war, we emigrated annually upwards of 400,000 of our population; a large proportion came to this country. Today, you have put up the bars. Our emigration last year fell to 130,000. We have 2,000,000 more in Great Britain than we had before the war. We must now concentrate in assisting emigration to our colonies. You are losing desirable immigration. We have raised the value of a pound from \$3.22 to parity. Our present depression is intensified by the recent rise of 40 per cent in the currency which was necessary to make good our return to the gold standard. Rates in London and New York are now more nearly in harmony and so we can look forward with hope to improvement. The shrinkage of world trade—reflected in idle tonnage—effects our shipbuilding that in turn, our iron and steel trades—their idleness is reflected in decreased consumption of textiles, boots, furniture, etc. All this has reduced trade activity and it is as you well know, a low operating ratio which puts up the cost of production.

Question of Subsidy.

The depression of prices and services including wages which economic orthodoxy would declare should accompany the rise in the currency met the not unnatural resistance of organized labor—wherefore the coal strike. In the abnormal circumstances arising from the appreciation of the currency, it can be argued there was justification for the heresy of a subsidy to the coal trade. Naturally, all economic purists will condemn it as much as business men dislike it, but I hazard the suggestion, good may yet come for steel, it may serve to set the of it. Acting as a subsidy in reality wheels of trade in motion and correct our entire situation. In short, a subsidy by the taxpayer direct instead of a subsidy more frequent in protective countries afforded to particular trades by a tariff which penalizes the domestic consumer for the benefit of the manufacturer.

Please permit me to turn for a moment to the United States. Anyone coming here now and having the advantage of talking to informed men must be impressed with the fundamental conditions that justify immediate prosperity. The stage in the United States seems set for it. The financial condition is exceptionally sound. The fashion for low inventories has released a volume of funds. Increased efficiency in the last three years has helped to keep the price level down. Transportation has been accelerated. The output per worker has been increased 17 per cent above pre war, I believe earnings have risen, contentment is abroad. This increased efficiency permits a greater volume of production with a lower labor force. You have surmounted reduced immigration. Increased efficiency has removed the need for plant expansion. There are more resources available for dividends, therefore your substantial stock market activity. You are going to have more resources available for foreign investment. There appears need for popularizing

the habit of foreign investment. The United States in so short a time being changed from a debtor to a creditor country must be an increased investor abroad. The country has not yet as a whole realized that a creditor country must not aim at getting its foreign debts repaid. At best they can get remittances of interest, and to make the world go at all, if the policy of Great Britain for the 40 years before the war is a precedent, they may have to loan every year, sufficient to pay interest on their foreign investments. These loans will quicken world trade. You have the resources and the United States must have confidence in foreign investments. There is need for the placing of these investments primarily in reproduction enterprises in borrower countries then will these rivulets of assistance bring back rivers of foreign purchases.

The advent of artificial silk is as yet an uncertain factor. Will it augment or supplant the demand for cotton?

You have here in New England, a situation similar to that of Great Britain. You have your development in the South comparable to the development which is taking place in some hitherto less industrially developed countries. Hydro-electric power has altered circumstances and we are driven more and more to being dependent on specialized production for employment. The quality of production alone justifies the peculiarity of location. The water power of the Merrimack and the coal of Lancashire justified the original location of our industries. I have been filled with admiration for the resources and the spirit developed by your New England States. Public spirit and vision moved certain of your prominent citizens to start a "Buy New England Goods" campaign. Self help is the first step to success. The movement has, I understand, been surprisingly successful. It has captured the imagination and fired local pride. It has now resulted in the so-called New England conference which should be a permanent organization among the New England States to intensify the prosperity of their home industries. This is just one example of the spirit which actuates industry in this great country. Your technical education, your philosophy as regards the treatment of labor are bringing their merited reward. There is every indication of increased prosperity in this great Commonwealth, and in it the cotton trade has played so historical a part. It is because of this prominence to the industry both in your country and mine that I feel justified as a concluding remark to appeal to your imaginations that as increased happiness in the world as a whole, as well as in the United States must come from greater commercial prosperity, so the world must have peace. There must be collaboration between the United States and Great Britain, and unity between the English speaking peoples is a better guarantee for the world than any League of Nations, but it must be still wider and aim at a world collaborating in and devoted to peace and contentment.



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Cotton Goods

New York.—There was a movement toward a downward revision of prices in the cotton goods markets last week after the large increase forecast in the cotton yield by the Government report. Prices on gray goods, sheetings and drills showed a drop of from a half cent to three-quarters cent a yard from the high prices of the year. Prices on finished goods held rather steady, as few are being offered at time and large quantities of goods are being delivered on orders placed several weeks ago.

The broad distribution of goods in jobbing and retail channels continued during the week. The new lines of percales offered showed more attention to fast colors and more elaborate designs. There was a better demand for new rayon mixtures for spring. Automobile fabrics sold well into next year, one large buyer taking 15,000,000 yards for October delivery. Cotton duck and tire fabrics held fairly steady, with mills fairly well sold.

Heavy curtailment of production due to the power situation continued to slow of yarn deliveries and helped check lower prices on gray goods. Production in New England mill centers showed a slight gain.

The whole cotton goods situation continued somewhat unsettled at the end of the week due to the irregular conditions occasioned by the attempt to readjust prices on the basis of the cotton decline. A great deal of uncertainty was shown by the buyers and mills alike with a disposition to await a further clearing of the cotton situation.

In the cotton duck market, the demand was of a limited character and there was no important business placed. Prices generally held well. Offers to mills for small lots of goods at cheaper prices generally failed to induce concessions.

The tire fabric market was quiet throughout the week. Buyers were not interested in purchasing beyond their immediate needs and mills were not inclined to accept any amount of business under present conditions.

There were a number of inquiries in the fine goods market for a variety of constructions. There was some unsettlement to quotations and an effort noted to adjust them. Buyers occasionally stated what they thought they should pay while mills had the task of figuring whether they would take the proffered business.

Buyers checking up on 128x68s combed broadcloth found 19½ cents the best they could do in the East

for spots or futures. No appreciable interest figured, for the intention was more to keep posted on the market than otherwise. The 144x76s held nominal at 24 cents to 24½ cents on contract and 24¼ to 25 cents for spots.

Buyers of finished goods found that deliveries are not to be had on many lines at current prices, so that there are few expectations of any radical changes in finished goods of a staple character for some little time yet. The tendency is to begin buying domestics in November and early December for spring, but as there are still a great many goods due on past orders agents are hardly likely to hasten a revision to secure added new business on sheets, bleached cottons or other staples.

The decline in cotton during the week had its effect on the Fall River print cloth market, with the result trading was very light. Interest demonstrated by buyers and sellers during this period was mostly in the action of the cotton market, sales being restricted to 50,000 pieces. The demand has been principally for 36 inches low counts, with a few twills and sateens included, with delivery extending through the next six largest weeks.

Cotton goods prices were quoted as follows:

Print cloths, 28-in., 64x64s	6%
Print cloths, 28-in., 64x64s	6%
Print cloths, 27 in., 64x60s	6%
Gray goods, 38½-in., 64x64s	9%
Gray goods, 39-in., 68x72s	10¼
Gray goods, 39-in., 80x80s	12¼
Brown sheetings, 3-yard	13¼
Brown sheetings, stand.	14¼
Ticking, 8-ounce	24
Denims	19
Staple gingham, 27-in.	11½
Kid finished cambrics	9½a10½
Dress gingham	13½a17½
Standard prints	9½

British Encounter Competition in Egyptian Cloth Market.

The United Kingdom is still supreme in Egypt as a supplier of light weight grey goods, according to a recent report published by the British Department of Overseas Trade, the American Consulate at London advises the Department of Commerce. However, Japanese exporters have made tremendous strides, mostly at the expense of the British trade, in supplying the market with the heavier grey shirtings, long cloths and T-cloths, especially in the six and seven-pound T-cloth.

Southeastern Selling Agency

LESSER-GOLDMAN COTTON COMPANY

OF ST. LOUIS, MO.

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Extra staples, and good 1 1-16 and 1½ cotton from Arkansas, Oklahoma, and Texas, and Memphis territory.

The Yarn Market

Philadelphia, Pa.—There was little business of importance in the yarn market last week. In spite of the severe drop in cotton prices after the publication of the government crop report, there was no severe break in yarn prices. Southern spinners held their prices firm and in only a few cases were there reports of yarns sold at lower prices. Most of the mills are well under order at present, there is no stock of yarns available to buyers and the continued curtailment in the South has proved a vital factor in keeping yarn prices steady.

A somewhat better inquiry for yarns for future delivery was noted towards the end of the week, but sales were hard to close owing to the differences in spinners and buyers ideas of prices. Most of the bids offered by buyers were considerably lower than spinners were willing to accept. The position of the spinners, in spite of the cotton decline, continued strong.

Deliveries of yarn from the South have been seriously slowed up by the enforced curtailment. Where spot yarns were needed buyers paid full prices without undue haggling, but would not anticipate requirements under present conditions. Buyers insist that lower prices should follow the cotton report, while on the other hand spinners point out that yarn prices are not yet above replacement costs and that they are not justified in accepting lower prices.

The position of combed yarns continued strong. Mills are well supplied with business for the present and the curtailment is preventing any undue pressure to secure business. Prices on combed yarns were unchanged from quotations of the preceding week.

Yarn prices in this market were published as follows:

Southern Two-Ply Chain Warps.	
8s	37 a
10s	38 a
12s	39 a
14s	41 a
16s	42 1/2 a43
20s	45 a46
24s	46 a47
26s	47 1/2 a49
30s	58 a59
40s	68 a69
50s	
Southern Two-Ply Skeins	
8s	37 a
10s	38 a
12s	39 a
14s	40 a
16s	41 a
20s	42 a
24s	45 a
26s	46 a
30s	47 a48
36s	55 a
40s	56 a58
40s ex.	59 a60
50s	67 a69

Part Waste Insulated Yarn.	
6s, 1-ply	33 1/2 a
8s, 2, 3 and 4-ply	34 1/2 a35
10s, 1-ply and 3-ply	36 a
12s, 2-ply	37 a
16s, 2-ply	38 1/2 a39
20s, 2-ply	41 a
26s, 2-ply	45 a
30s, 2-ply	46 a46 1/2
Duck Yarns—3, 4 and 5-ply.	
8s	37 a
10s	38 a
20s	42 a43
Southern Single Chain Warps.	
10s	38 a
12s	39 a
14s	40 a
16s	41 a
20s	42 a
24s	44 a
26s	45 a
30s	46 a47
40s	57 a
Southern Single Skeins.	
6s	37 a
8s	37 a
10s	38 a
12s	39 a
14s	39 1/2 a
16s	40 1/2 a
20s	41 a
22s	42 a43
24s	44 a
26s	44 a45
30s	46 a47
Southern Frame Cones.	
8s	36 1/2 a
10s	37 a
12s	37 1/2 a
14s	38 a
16s	38 1/2 a
18s	39 1/2 a
20s	40 1/2 a
22s	41 a
24s	42 1/2 a43
26s	43 1/2 a44
28s	44 1/2 a45
30s	45 1/2 a46
30s Tying in	47 a48
40s	55 a56
Southern Combed Peeler Skeins, Etc.—Two-Ply	
16s	56 a60
20s	58 a62
30s	65 a67
36s	75 a80
40s	80 a85
50s	87 1/2 a90
60s	90 a95
70s	1 05a1 10
80s	1 18a1 20
Southern Combed Peeler Cones.	
10s	48 a49
12s	49 a50
14s	49 1/2 a50 1/2
16s	52 1/2 a
18s	51 a52
20s	52 a
22s	53 a
24s	56 a
26s	56 1/2 a
28s	57 a
30s	60 a
32s	62 a
34s	65 a
36s	72 a
38s	74 a
40s	75 a
50s	80 a
60s	90 a95
70s	1 05a
80s	1 15a
Eastern Carded Peeler Thread—Twist Skeins—Two-Ply.	
20s	50 a
22s	51 a
24s	56 a
30s	59 a
36s	63 a
40s	65 a
45s	70 a
50s	75 a
Eastern Carded Cones.	
10s	41 a
12s	42 a
14s	43 a
20s	47 a
22s	44 a
26s	51 a
28s	53 a

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WANT position as carder, spinner, also experienced in spooling, winding twisting and warping. I. C. S. graduate. Age 35, can. come on short notice. No. 4682.

WANT position as carder or spinner. Have been overseer in both departments and also experienced as assistant superintendent. Best of references. No. 4683.

WANT position as superintendent of small mill or assistant in larger mill. Now employed as carder in large plant. Good references. No. 4684.

WANT position as manager or secretary of 5,000 to 10,000 spindle mill. Prefer Alabama, or state west of Alabama. Am well qualified and can give excellent references. No. 4687.

WANT position as second hand in carding in large room. Have had 20 years experience. Married, age 32 sober, musician. Prefer South Carolina. Good worker, know colored and plain work. No. 4688.

WANT position as overseer spinning or carding and spinning. Experienced man who can deliver the goods. Good references as to character and ability. No. 4689.

WANT position as overseer weaving, the Carolinas or Georgia. Now employed, but wish to change. Experienced on plain and fancy goods. Excellent references. No. 4690.

WANT position as overseer cloth room. Sixteen years experience. Now employed as overseer. Have family. Good references. No. 4691.

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WANT position as superintendent of weave mill. Long experience in good mills. Understand economical production of quality goods. Prefer mill in the Carolinas, Georgia or Alabama. Special experience on ducks and chambrays. No. 4693.

WANT position as overseer weaving on plain cam weave. Have been overseer for four years. Married. Good character, good references. No. 4694.

WANT place as overhauler in card room. Can give excellent references from mills in which I have done this work and can give satisfaction in every respect. No. 4695.

WANT position as overseer carding or assistant superintendent. Prefer mill on white goods. Age 26, single, 9 years experience. Now overseer and night superintendent. No. 4696.

WANT position as master mechanic. Now employed, good reasons for wishing to change. Large job preferred. Good references. No. 4697.

WANT position as overseer spinning, or spooling, winding and twisting. Now employed but wish larger place. Long experience and good references. No. 4698.

WANT position as superintendent of medium size mill or overseer carding or spinning in larger plant. Now employed as assistant superintendent. Good references. No. 4699.

WANT position as superintendent of yarn mill. Long practical experience as superintendent and overseer and have excellent record. No. 4700.

WANT position as overseer carding or would take overseer's place in large place in large mill. Experienced man of character and ability who can give satisfaction. No. 4701.

WANT position as superintendent. Experienced on both colored and white goods, also fancies. Fine references. No. 4702.

WANT position as carder, spinner, or twister room man. Good habits, long experience and references to show character and ability. No. 4703.

WANT position as master mechanic. Number of years experience in mill steam plant and machine shop. Have first grade Fulton County (Ga.) engineer's license. No. 4704.

WANT position as carder or spinner. Have long experience in number of first class mills and can give excellent references. No. 4705.

WANT position as dyer, bleacher or in charge of mercerization. Have had 15 years experience in warp and skein work in some of the finest mills in the country. Will accept place either as superintendent or overseer. No. 4706.

WANT position as superintendent of yarn mill or carder and spinner. Experienced man with long record of successful service. Good references. No. 4707.

WANT position as overseer weaving. Now employed as overseer. Have been with present mill 19 years, 5 years as overseer. Have had 23 years experience in weaving. Want larger and better paying job. No. 4708.

WANT position as overseer weaving, slashing or beaming. Now employed but wish larger place. Will be glad to submit references to mill needing high class man. No. 4709.

WANT position as overseer weaving or would take second hand in large mill. Eighteen years experience as overseer. Now employed but have good reasons for wishing to change. Good references. No. 4710.

WANT position as overseer spinning. Age 34, married, 15 years experience. Can get real results. References. No. 4711.

WANT position as overseer spinning. Now employed, been on present job several years. Would consider permanent job as spindle plumber in large mill. Age 33, married, excellent references. No. 4712.

WANT position as superintendent of yarn mill or overseer carding or spinning. Long experience in good mills, good habits. First class references. No. 4713.

WANT position as superintendent of medium size mill at good pay. Have had 20 years in the mill, unusually good experience in weaving. Now general overseer in large plant. Good references. No. 4714.

WANT position as overseer weaving. Experienced on wide range of goods and can get results. Now employed but can come on short notice. No. 4715.

WANT position as overseer carding or spinning. Nine years as overseer in these departments. Age 37. Best of references. No. 4716.

WANT position as overseer weaving. Want good job in first class mill. Competent man who can get production at low cost. Good manager of help. A-1 references. No. 4717.

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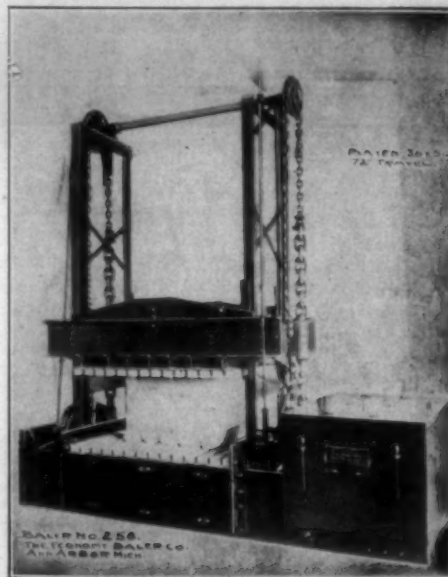
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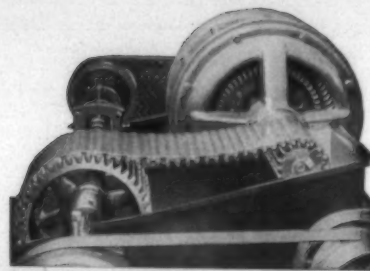
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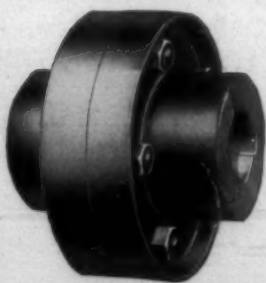
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stand severe line-
shaft service. Flang-
ed to protect the
workman from be-
ing caught on the
bolt heads or nuts.
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to template, making
them interchange-
able and therefore
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POWER TRANSMITTING MACHINERY



FIG. 27

LANE

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of the quality, strength and durability,
which are built into it from the start.

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